

MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY



I.—THE METHOD OF METAPHYSICS; AND THE CATEGORIES.

BY S. ALEXANDER.

PHILOSOPHY consists for the most part, like other sciences, in applying a single principle of a simple character to a variety of different topics, or rather in attempting to test or verify the possibility of applying it to these topics. It takes for its beginning some fundamental fact which as Berkeley said long ago of the principle which he discovered, a man has only to open his eyes to see. The reasonings by which the philosopher sometimes supports the truth of the fundamental fact are, not so much arguments for what cannot in the nature of the case be proved, as contrivances for putting his readers into the right position for seeing. And the verification of it by applications or deductions is chiefly useful in so far as they are a means of persuading the reader of the initial principle from which they are deduced. The topic which I propose to treat as an application of a certain fundamental truth or fact or principle is the method of philosophy itself; and as I believe that method to be dictated by a simple fundamental fact of experience, I begin with the statement of this, even at the risk of being tedious to those who have read it already,¹ of whom I am safe in assuming that the number is small.

The fundamental fact of experience is that any mental experience whatsoever declares of itself that there are two things compresent, one the act by which we apprehend and

¹See *Proceedings of Aristotelian Society*, N.S., vols. ix., x., xi. (1908-1911).

the other the object which is apprehended. The word thing is used here in the loosest possible way to stand for something or other ; whatever form it may assume, *sensum*, percept, image, thought, any *cognitum*. What is certain is that he who has any experience experiences two things. One is the object he is concerned with, and that is not his mind ; the other is his act of experiencing, an event which since it is experienced in the course of his life not by itself but in continuity with other such events, he comes to know as an act of that continuous tissue of mental events which is called his mind. It may be added that similarly the object through its continuity with certain other objects comes to be known as a partial appearance of what is commonly called a *thing*. You may take then perception, or images, or thoughts, judgments. In each case you find two things together, one a mind acting in different ways according to the nature of the object ; the other an object which is not a mind, some piece of the world which in virtue of this particular mental act is revealed to the mind as percept or image or proposition or what not. The object may be illusory, but it is external. It may be imaged, but image as it is, the image is in the same sense external and independent of the mind as the percept which it represents. If I am in the mental act of imagining a table, the same table as was before me in perception is now present along with me in a somewhat different form. When I am judging, I am together with some real, *i.e.* non-mental connexion of things, some fact of the world. Strip your mind of the prepossession that what you apprehend must be something dependent on your mind ; strip it more particularly of the prepossession that images and judgments are something peculiarly mental ; and you see that to have an experience is the compresence of the two things named. What compresence means, what the togetherness of things ultimately implies as to the nature of the universe, that is something to be inquired into afterwards, though it does not fall within the limits of this paper. At present all that it means is the mere fact of togetherness. It is not the *additional* consciousness of togetherness. In certain reflective conditions I may be conscious also of togetherness as such. But when I merely perceive the table, I am there and the table is there, but I am not aware that I am there *together with* the table, or *and* the table, as if I were aware of the table and of 'and,' or of its togetherness with me. What I am aware of is only the table. The togetherness or compresence of the perceiving and the table is the perception of the table. I experience the togetherness

only in the sense that I have this perception.¹ Thus the table and I are together in precisely the same sense as the table and the chair are together. A looker on who could see me and the table in the same way as I see the table and the chair would say that the table and I or the table and the chair are together in the same sense. Instead of the chair there happens to be I, who am a mass of experiencings. My perception of the table is thus the fact that there is a thing which can perceive and a thing which so provokes it as to perceive in the manner appropriate for perceiving a table. Any experience whatever means therefore compresence² within the world of the experienter and the experienced in precisely the same way as two experienced things are together for the same experienter. For me looking on, there is a table; there is also a chair. For me engaged in perceiving the table alone, there is myself; there is also the table. The recognition of this is of the utmost importance for our advance.

2. *Enjoyment and Contemplation.*—The two things experienced are so differently experienced that it is useful to distinguish them by technical names. I propose to say that the mind is enjoyed and its objects contemplated. Or we might say that the mind is lived through and objects are cognised. But this raises difficult antitheses, for the mind is more than lived through, it is 'minded'; and to say that objects are cognised suggests that we cannot know our minds, but in a quite real sense we know our minds, though we do not know them by way of contemplation as we know external objects. Both sets of existences can be treated scientifically, for the physical sciences are the description and explanation of external objects, and psychology and the other mental sciences are description and explanation of the enjoyed thing. Enjoyments do not preclude description. On the contrary, as Locke knew, they are sometimes easier to describe than external things. Enjoyment can enjoy itself to the highest degree of analytical refinement. It only does not contemplate itself.

But though the enjoyed and the contemplated are so differently experienced, it may be observed that the distinc-

¹ I propose in a later paper to return to this experience of togetherness in its connexion with relations in general.

² Perhaps I should say at once that compresence does not mean simultaneity in time. I am compresent with a past event which I apprehend. And indeed the events I perceive always are past, by however small an interval. Compresent means simply belonging to the same universe.

tion is not peculiar to the two groups, mind and physical things. On the contrary the distinction occurs on other levels of existence. I will assume for the moment that life is not necessarily also mind. Well! On the level of life, before mind came into existence, living things so far as living enjoy their life and contemplate mere physical things. No living being can share its life with another living being, it cannot live the other's life, it can only live its own, and just because of this it cannot contemplate its own. Even on the level of mechanical existence, before life has appeared, the same thing holds true. Each piece of matter exists to itself; we who contemplate several of them can compare and identify them, and discover the general laws of their actions; but could we penetrate into the nature of each, we might find in each its distinctive difference, and that it contemplates other pieces of matter and does not share their existence.

In the same way there is no difficulty in supposing higher forms of existence than our own to which our minds would be contemplated objects. Let us call such beings angels. Each angelic being would enjoy its own angelical existence, of which we can say nothing except that it must include mind and all lower forms of existence. But the angels would contemplate our minds much as we contemplate physical things. Wherever then a new order of beings emerges, those beings enjoy their own peculiar existence, each his own, but they contemplate everything lower than themselves. The distinction of what we enjoy from what we contemplate is therefore not peculiar to man. He shares it with at least the angels, and the method of philosophy which is based on this distinction must therefore be angelical.

3. *Result of this distinction.*—Thus our experience shows us that there are two orders of things. One is my mind, or your mind if you are the inquirer, and the other is external things. It affirms this difference, but at the same time it assures us that our mind is but one thing amongst a multitude of others, only that it happens to be enjoyed and not contemplated. These two facts, the likeness of mind and things and the unlikeness of mind and things, dictate metaphysical procedure.

In the first place they exclude certain principles of method. (a) They exclude the principle that other things depend on mind. For the fundamental fact of experience informs us that mind is but one thing together with external things in the same way as one external thing is together with another. There is one universe in which both kinds exist.

The phenomenon of knowing arises from the special and doubtless exalted character of the thing which is enjoyed. But though it clearly follows that things would not be perceived or thought except there were a mind to perceive them, it by no means follows that they owe to mind their nature but only the fact that they are perceived. They do not owe to mind their perceptual or thought character, all that they owe to mind is that their perceptual or thought character becomes revealed.

If idealism is understood not as it is sometimes understood in the vague sense of asserting that things form a system (which is compatible with many different forms of philosophy) but in the proper sense that somehow things depend for their reality on mind, then idealism is excluded by our principle. All attempts to make metaphysics into epistemology mean exalting unduly the fact of knowing, which however important is but one kind of relation in the world among others, are therefore condemned.

(b) It excludes the principle that mind is co-extensive with physical things, if not with life. For to suppose that physical things are at bottom mind is to overlook, not, as the former group of theories overlooked, the fundamental community of mind and things, but the fundamental difference of mind and things which is expressed by saying that the one is enjoyed and the others contemplated. Under this ban would come a doctrine such as panpsychism, the simpler forms of monism, such as Spinoza's, while a monadism like that of Leibniz would stand in need of qualification.

4. *The Method of Metaphysics.*—Having discovered what the method of metaphysics is not, we may now proceed to sketch what it is. Metaphysics, as distinguished from particular sciences, may be regarded as an attempt to describe the ultimate nature of existence and the pervading or pervasive characters of things, a definition sufficiently near to that of Aristotle to be regarded as identical with his. The pervasive characters of things, such as thinghood or substance, quantity, relations of time and space, are distinguished from the special characters which things have in virtue of their individuality; on the other hand their individuality is a pervasive character. Now whatever the result may be, we can say on the strength of the fundamental principles laid down above that the method of metaphysics must like those principles themselves be empirical. Though concerned with different facts, or with facts of a different order, metaphysics and science alike are concerned to describe and systematise

facts of experience, furnished in the last resort, after whatever use of adminicula, by simple inspection. The distinction of science and metaphysics is a question not of method but of frontiers.

But secondly these principles indicate in what direction we should look for the pervasive characters of the world. For our fundamental fact informs us that mind or that which is enjoyed is but one thing together with other things in the world, endowed with the highest quality we are aware of, namely consciousness or knowing, but still only first among equals. Mind is but the most gifted individual in a democracy of things. Moreover allowing for the difference in the distinctive character of mind, the relation of mind to things is not of itself different from the relation of things to one another. All that experience tells us is that all are equally together with one another. We are hence led to expect that we may use our experience of the one kind in order to understand the other: that to discover the pervasive characters of things contemplated we may first look to our enjoyments, and *vice versa*: that to understand objects in their fundamental characters we may examine ourselves, and to understand ourselves we may take hints from objects. Further that relations between ourselves and objects, and relations between objects themselves may thus be used to elucidate each other.

✓ 5. *Proof of the method.*—But thirdly this precept which is thus put forward as likely to yield guidance in our inquiry is enjoined and established, when we remember that what is enjoyed does not subsist by itself in independence of what is contemplated, but that it has a peculiar relation to one of the objects contemplated, and that consciousness, the distinctive feature of such enjoyments is a character, a specific character of this object: in other words, that mind is a character of or a function of a body which is also physical and vital, like the other objects which mind contemplates. Mind is, to use a metaphor, the flower of a thing which is in other respects merely alive and physical. Or we may put the matter in the reverse way, and say that certain physiological processes are not merely physiological but also mental.

This truth is established by experience, and experience of the most familiar kind, slowly acquired and cumulative and voluminous in its effect, but just because of its familiarity not always easily recognisable. It is of two main sorts.¹ In the

¹ This topic is treated more fully in the paper on "Self as Subject and as Person," §§ 4, 5 (*Proc. Arist. Soc.*, vol. xi., 1910-1911).

first place we become aware of a special intimacy of our enjoyments and our body because all our enjoyments end in bodily reactions, whether organic or motor. No matter what objects we contemplate and however speculative they may be, whether they are objects of sensation or perception and therefore intensely practical or thoughts remote from practice; sooner or later, by successive levels of approximation to a sensory contact with the real world, our enjoyments corresponding to these objects issue in a bodily reaction which we contemplate. In this way the contemplated body is joined in our experience with our enjoyments rather than with the series of external events. With the series of external events it is indeed in a certain sense discontinuous. For while all external series apprehended by me are succeeded by some change in my body, this change is not apprehended in continuity with them in the same way as we apprehend the continuity between the members of the series itself. When the wind blows a chimney down, the causal continuity is contemplated of these two events, but I am aware of no such continuity between the falling chimney and my ducking my head to avoid the bricks. When I observe *you* performing the same action I can with a little science fill up the gaps; your eyes are excited and through certain nervous processes your body reacts in the movement of avoidance. But I do not contemplate in your case the accompanying acts of mind, and, for all that I observe, you might be an automaton, as some have believed. On the other hand, in my own case I do enjoy the sight of the falling chimney, but I am not aware of the excitement of the eyes or the later nervous processes which issue in the motor discharge, and so long as I am engaged in contemplating the falling chimney I cannot contemplate these bodily intermediaries in myself. When I do so contemplate them, in thought founded on physiological knowledge, I am no longer contemplating the falling chimney. In this sense the action of avoidance is discontinuous with the external causal events. On the other hand, some action of my body is always contemplated in close relation with the last step in my series of enjoyments. In this way we come, by the most obvious experience, to enjoy our mental series together with our body, in a way in which we do not experience them together with any other contemplated object. We are always making the discovery of the privileged position of our body, that while it belongs to the physical world, it is always contemplated together with our enjoyment of our minds.

This source of experience comes in to reinforce another

which is not less certain but far less obvious in exposition. We are directly aware that our mind and body are one thing because we experience them in the same place. The familiar primitive idea that the soul is extended like a physical thing meets with incredible repugnance on the part of the man who has learned to distinguish between his enjoyments and what he contemplates. Still more the equally empirical proposition that mental processes occur and are enjoyed in space. Yet it is acknowledged that mental processes occur in time, have the temporal characters of succession and duration, though indeed some who distinguish mind itself from its processes declare that mind to be timeless. But there is no greater difficulty in the spatial than in the temporal character of mind and its processes, and both are equally empirical facts. For mental processes are not contemplated in time but enjoyed in it. To neglect this difference leads inevitably to the belief that time is not something objective but subjective, whereas time is contemplated in external things and enjoyed in mental life. And again experience shows us that each mental event occurs in the same moment of time as some external event (though not necessarily and indeed never the event which is said to be present when we perceive its happening). Precisely the same thing is true of space. The repugnance arises, apart from moral causes, from the supposed difficulty of seeing our minds in space. But in enjoying our minds we do not contemplate any spatial character but enjoy it, and the example of time is sufficient to show that the same character may be both contemplated and enjoyed. The experience of ordinary crude common-sense assures us that our mental processes are located somewhere within our bodies, that is, are enjoyed in places also contemplated as somewhere within our bodies. The exact locality is very uncertain. But there is the same uncertainty of exact localisation in time, where we suppose that we perceive events at the moment of their occurrence, whereas more exact experience tells us that we always perceive a physical event a small but measurable interval after its occurrence, and we fancy that we see a star like Sirius shining at the moment we see it, when it has taken the light nine years to reach us, and Sirius may be annihilated at the moment we see him shining. Thus it is only more careful observation that tells us that the space in which the mind is spread out is not our hearts or our feet but our heads, or our nervous system generally, or that special mental processes have a distinct course in our heads; and it is only by knowledge of an advanced kind, not possessed by the ordinary man, that we

acquire strictly accurate notions of the locality of our nervous processes, so far as they are known. In like manner special knowledge and methods are necessary to define what physical events really are contemporaneous with the mental processes themselves.¹

In these ways then we learn by experience, helped out of course by reflexion on it, that mind and body are not two things but one. They are in the same place, and every mental process issues in some bodily reaction because it is in one of its aspects itself a bodily process. Certain living bodies have minds; in those bodies, certain vital processes possess mentality and are mental processes as well as vital. Thus the relation between mental and vital process is of the same sort as the relation between vital and physical or chemical processes. Certain chemical processes live. In like manner certain living processes enjoy or apprehend. Thus the highest thing we experience, a conscious organism, exists on at least three levels of existence. The living level with its distinctive properties of irritability and adaptation is founded on a lower level of material actions, whatever those actions are. The highest level of conscious process is founded on a lower level of living process. Thus all "minding" is living as all living is motion. But not all motion is living and not all living is mind. Only certain refinements and organisations of material action live, only certain refinements and organisations of living action "mind".²

¹ To the angels, the matter would present no difficulty, and our method requires us to ask how things present themselves to them, as far as we can. To them our minds would appear spread out in space and occurring in time, just as we see vital processes in a plant occurring in time and place. We cannot tell what consciousness would look like to them in contemplation. We should need to have the enjoyment of angels before we could have the contemplation of mind. At most as we watch the behaviour of animals or of one another we see a living thing which behaves as if it had mind, and of whose mentality we have not sight but assurance, partly from his words if he is a man, partly from certain experiences which we share together, as for example common pursuit of the same object, *e.g.* food, of which one deprives the other, or common interests which are not attained except upon the supposition that the other partner is conscious (*e.g.* sexual interests).

² It is clear that this statement of the relation of body and mind or of neurosis to psychosis is not the same as the so-called doctrine of psychophysical parallelism. In fact it shows that doctrine to be gratuitous. For there can be no parallelism except there are two series to be parallel, and the mental process and the physiological one are now shown to be one and the same. We can of course distinguish the conscious characters, or enjoyed characters, from the merely physiological or contemplated ones. But the mental process is not a separate existence from the physiological

6. *Proof of the metaphysical method (contd.).*—From these results of experience, we can proceed to establish the method recommended by our fundamental principle. For each thing which exists on a higher level contains the lower level of existence. But when we compare the higher with the lower level we distinguish the specific character of the two levels from characters which are not specific. Thus sensible quality (colour, smell, etc.) is specific to material existence, life to living processes, consciousness to mental. The specific characters of the lower activities are of course carried on into the *thing* which is founded on them, but not into the new *processes* which are founded on them. Thus a living body has colour and smell, but life itself is not coloured or fragrant.

one but the same; and except for the distinguishing character of consciousness the other features of the neurosis are carried up into the psychosis. Indeed to distinguish the two series as running parallel is to treat the neurosis as if it would be the same thing as a neurosis if it were unaccompanied by consciousness; and this is accurately untrue, and if it were stated as a fact would be the falsity of epiphenomenalism.

Accordingly psychophysical parallelism is for the most part regarded not as a law of nature but as a mere working hypothesis or convenience for psychology. But it is useless even here. The convenient generalisation which psychology might use is that every psychosis is also a neurosis, and this is true. The hypothesis of *parallelism* which implies two series is a fiction for psychology as well as a metaphysical untruth. The parallelism that concerns psychology is that between two really different series, on the one hand the mental (or physiological) processes, and on the other the non-mental or physical series of the objects which the mental process contemplates. It is the parallelism of mind and external things (what Prof. Ward calls the neurophysical parallelism). But this last designation is apt to lead to confusion.

It is difficult to believe that the hypothesis of psychophysical parallelism would have been invented except for the error of supposing that mental processes had differences of quality corresponding to their stimuli. If we imagine them to have contents (other than their direction, or intensity, etc.) corresponding to the quality of their real objects, so that in some way mental processes are qualified, not indeed as being green or sweet, yet by some quality or other, and that hence states of mind have contents in the form of presentations, however conceived; then the idea of parallelism is a natural and inevitable one. For the neurosis merely presents varieties of *process*: it is swift or slow, occurs in one structure and not another; and it is impossible to understand the connexion between such differences and the quality which makes the sensation of green different from that of sweet. But when once we realise that mental processes have for their distinguishing features, or "contents," not differences of quality but purely process differences, intensity, duration, and what I call direction, and that the supposed differences of quality are really differences in the objects revealed by those processes, the ground for the alleged parallelism gives way. The differences in the neural process are carried up in their appropriate form into the mental process differences. The theory appears therefore to be really a piece of lingering introjectionism.

But there are other characters of the lower level which are not specific. Thus causality exists between material bodies or between the particles of a single material body. Now this relation is carried on into the living process, where causality can be detected in the relations of living processes to one another, or between the stages of the same living process. Thus since each lower level is carried on into the next level of process of which it is the foundation, certain characters of the lower level are represented in the higher. So, to compare life and mental enjoyment, causality is a character of living process which is carried on into enjoyment. It follows in accordance with this conception that where enjoyment has characters different from its own distinctive and peculiar character of consciousness, these characters will be possessed also by its own vital or physical substratum. Thus what is contemplated by us in physical or living things as a certain kind of relation such as causality will have corresponding to it a certain character in enjoyment. What is contemplated is in such cases also enjoyed.

Now in order to discover these characters of things which are represented at the higher stage we must put ourselves where we are experiencing these characters from the inside, that is in the enjoyment of ourselves. What we can only contemplate and cannot also enjoy we can only accept as characters of parts of the real world, but as we cannot enjoy them we cannot tell what they are to their own possessors.

7. *The Categories.*—Here then we have the clue to the pervasive characters of things. They are familiar to us as the categories, whether of sense or understanding. They are characters of things, but they are those characters which are both enjoyed and contemplated. They are found both in mind and in things outside us. And it is this which gives them the prerogative position which has induced philosophers upon occasion to deny that they are contained in experience, and in some form or other to regard them as forms imposed upon things by the mind. Being as it were the canvas on to which the greatest diversity of things, things varying in their specific characters, is worked; remaining the same whether we are experiencing the extraordinary variety of material objects, or of living beings, or even of minds; they are the fundamental characters of things and deserve that their position in the scheme should be marked by such terms as forms or *a priori*. But they are as much experienced as colours or tables; they only have a greater value. But they do not belong to mind as such nor are de-

pendent on it and they are not specific to mind, of which the truly specific character is consciousness or enjoyment. They only stand in closer relation to mind because we who are minds, in our enjoyment of them, as distinct from our contemplation of them in external things, experience them from the inside, and it is therefore by describing them as we enjoy them that we must discover their real nature as they are for the things which we contemplate also as having these characters. Without raising the question of their number or relation to each other, we may enumerate some of these characters which we can experience both in ourselves and in what is not-ourselves. We can enjoy in ourselves, time-character and spatiality, continuity in the form of substance and in the form of causality, intensity, identity and difference.

Let us take in particular causality because of the historical rôle it has played in philosophy. It is an illustration of the fundamental principle, that minds and mental events are but things or events in a world which contains equally physical things and events, and that what distinguishes the mental is but its new specific character of consciousness. For causality is experienced not merely in the connexion of external events, but in the action of our minds or wills upon external things, in manipulating or altering them, and in the internal actions of our own mind within itself, for instance in calling up ideas. But if we seek to find the real nature of causality, we must look for it first in our own mental history. Regard contemplated objects only and causality seems to be undiscoverable except as uniform sequence. But turn to our own minds in the experience of willing, whether a change in our own ideas or a change in external things, and we become aware in enjoyment of the continuous transition of one mental process into another in time; for example, the continuous transition of the imagination or thought of my arm being lifted into the perception of the arm being lifted. What we experience here is continuity in succession and the outcome of the final process from its antecedent. This is the enjoyment of what we afterwards call power. When we turn with this experience to external causality, we can now more easily discover in contemplated events the same features of continuity in a definite order of succession, the continuous sequence of the falling of the chimney on the blowing of the wind. Thus a certain enjoyed experience enables us the more easily to discover in external things a character which we call physical causality, and we can then go back and call that enjoyed

experience causality also. And it is notorious that we do thus use our internal and our external experiences to reinforce and elucidate each other.

Consequently if we have made an imperfect or erroneous analysis of the external relation we transfer this error to our minds. Hume's error has often been pointed out, when he criticised the doctrine of Locke that we most easily experience causality or power by observing the action of our wills either upon our bodies or the course of our ideas. He supposed that because we do not know the movements in our nerves which intermediate between our wills and our acts, we cannot therefore be aware of causality, overlooking this very experience of internal process which Locke had tried, most imperfectly, to describe. Hume looked for a contemplated object, where his attention had been directed to an enjoyment; and consequently he could find in mental action only the same sequence as he found in contemplated objects.¹

But the above statement is far from being satisfactory or sufficient. It is true that he who seeks for causality will find it most easily by observing the enjoyments which constitute an act of will. But this might suggest two misunderstandings which must be guarded against. It might be thought that experiencing causality in our wills, we interpret external things after our own likeness by an analogy. Now it may be after our own likeness that we attribute, as the primitive mind does, a will and mind to things like trees or dolls. But it is not by analogy that we attribute to them causality. Our enjoyed experience enables us to find the same features in external things; not merely to impute them, as it were by a hypothesis which is found to work successfully. The causality is there in the things, and we merely are the better able from our own enjoyment to see it and enter into its nature. But in the next place, the statement might lead us to suppose that it is by a happy accident that we understand causality in the mental phenomenon of willing, and that there is no vital connexion between the experience of causality in ourselves and in the external world. The fact is that willing, though the most favourable case for observing causality in ourselves, is but a special case of causality, where the ultimate result is anticipated in idea. But the experience is not confined to willing. We have it

¹ No doubt his failure to apprehend the fact of mental continuity would in any case have stood in the way of his recognition of continuity in things. Also it must be remembered that the ideas of reflection of which Locke spoke were for him contemplated objects, not enjoyed ones.

wherever we experience the determinate continuous sequence of one mental process upon another within one interest. When the milk-cart comes and the rain falls there is no immediately continuous sequence of the one mental process of perception on the other, as there is in the perception of the falling chimney when the wind has blown. But wherever this continuous and determinate sequence of one mental process on another occurs, there we have enjoyed causality. Willing is one case of this general rule. Enjoyed causality is thus determinate continuity in the succession of mental process. (Where we will, we have in addition the enjoyment of active causality.) Now it is not accidental that this simpler experience of causality should also lead us to the discovery of causality outside us. For mental processes do not exist without their objects, which are external; though I may sometimes be interested in the internal process, and sometimes in the external object. To enjoy continuous and determinate sequence of one mental process on another in myself is at the same time to contemplate in the objects of those mental processes some corresponding character, and this is their causal connexion, their continuous and determinate sequence in time. Every experience of external causality gives me also an enjoyment of my own causality, and every experience of my own causality means that I contemplate causality in external events. That the determinate continuous succession in external events means also as a matter of fact uniformity of occurrence has its correspondent internal experience of uniformity, for a causal connexion in things means also for me the habit of expecting the one when I have seen the other. Hume, overlooking continuity both in external things and in mental process, mistook a symptom for the fundamental character.

Thus to enjoy a category in myself is also to contemplate a category outside me. I will not enter into questions of interpretation of Kant, and I will not say that this is what his demonstration of the Analogy of Causation meant. One patent difficulty in so maintaining, is that for Kant as for Locke the empirical self given in ideas of reflexion was an object not enjoyed but contemplated. But so far as the proof of that Analogy means that for an event there must be empirical material, and that it must be related with some other event in time according to some rule of antecedence and sequence, the proof seems to depend upon considerations such as the above, and if Kant did not mean the above he might well have meant it. As another instance of a category which at once illustrates the proposition that a category

is both enjoyed and contemplated, and the affinity of this proposition to the Kantian method, I will take that of intensity or intensive quantity. What is enjoyed in the mind is intensity, what is contemplated in the object is the 'degree' of the *sensum*; and both intensity and degree are the same character, appearing the one in the mental process, the other in the object. The candle-light has extensive quantity in so far as it is measurable in terms of the unit light. It has intensive quantity or degree in so far as its brightness occupies a determinate place upon a scale of brightness, measured by its interval from some fixed point upon the scale. Now the distinctive quality of the *sensum* we can learn only from contemplation, but that it will have some degree or other is guaranteed by the intensive quantity which the sensing process by which we apprehend it possesses. Kant called this truth an Anticipation of Observation.

8. *A Priori Ideas*.—We may stop to consider the bearing of this conception of the categories upon the time-honoured question of the origin of *a priori* ideas and principles. Kant's version presents us with a miracle; Spencer's with a biological improbability. To Kant, the categories are the non-empirical elements contributed to experienced objects by the mental partner of that experience. But however unjust it may be to him to describe his system of categories and forms of sense as mere tools for working up experience, a "machine-shop" in James's phrase, it remains nothing short of miraculous that causality if not intrinsically contained in the empirical contents of experience should get into them from the outside. And as we have seen it really does belong to the "empirical instruction". On the other hand the Spencerian attempt to trace these categories to the accumulation of experience which does not originally contain them, to regard them as acquired in the history of the race however much they may be original to the individual, appears to have against it biological principle, even if we could anyhow understand how for instance a combination of visual and motor experience, inherited through no matter how many generations, could come in the end to *feel* like space. Is there more hope from James's own doctrine, safe as it is against biological objections? James has suggested (in the famous concluding chapter of his *Psychology*) that the categories belong to those portions of our knowledge which instead of coming in by the front door of sense come in by the back door of variations in cerebral tendencies. Just as we may see yellow, not only if we look at a field of buttercups but if we stimulate the optical parts of our nervous

system from within by a dose of *santonin*; so, causality is the fortunate endowment of a brain or mind which succeeds by envisaging objects in this way.

But fascinating as this doctrine is, and conceived in strict consistency with evolutionary precedent, it involves a miracle no less than that of Kant, and one indeed of much the same sort. The analogy with sensation breaks down upon examination. For if yellow may be presented to us by internal causes, it may also be presented to us by external objects. But number, to take this unexceptionable category, is not, upon this theory, induced in us by objects. The only usefulness of the analogy of yellow is that it shows that a sensation may be excited internally as well as externally, though the question is still left open whether the brain would be functional for sight sensations if it had not first been impressed from without. But the real difficulty remains untouched. For granted that yellow is *a priori*, the buttercup is empirical or *a posteriori*. For though each of its sensible qualities be admitted to be mental (needless to say I do not admit this) yet avowedly the collocation of sensible qualities in the whole thing called a buttercup is empirical. In what sense then can we say that this empirical combination has a certain number of petals, or how can any empirical proposition be said to verify a pure creation of the mind? For to verify numerical truths empirically the empirical propositions must contain numerical characters. Now this is precisely under another form the same problem as Kant failed to solve. There is still the imposition of purely mental creations upon empirical products. To show that we perish unless we think the world in the light of these original endowments of the mind is indeed to prove their necessity; but it does not prove that they are not empirical. The difficulty can only be evaded if all our thoughts are treated as original, if the mind becomes a Leibnizian monad, but in that case all mental affections would, strictly speaking, be equally *a priori*.

Upon the view of the categories maintained in this paper, all these difficulties disappear. For instead of being specific to the mind, they are just those characters in the world which are pervasive and possessed by things as well as mind. They too are empirical, though of a higher order of significance than *a posteriori* experience such as Kant called empirical, under which head be it observed we should have to include consciousness itself which is distinctive of mind. They are therefore in no sense modes of envisaging empirical data, nor instruments for working those data up into intelligible products. They are those characters which are carried up

from material existence into mental existence and are present there in enjoyment. They belonged to things before the particular thing which has the property of knowing came into existence. We do not need to verify our conception of causality by empirical experience, for those empirical objects already contain it. Rather in coming to be aware of empirical connexions of events we are able to verify in ourselves, only in the form of enjoyment, the same experience as enters into empirical connexions.

We may perhaps ask, is there then no room for the application in the theory of knowing of the idea of successful variation which James attempted to use with what seems to me so brilliant a failure? The answer is given at once if we remember that mental processes are but instrumental to the revelation of the world, and the consequent maintenance and perfection of the being which possesses mind. Consciousness is that fortunate variation, the invention of a brain fitted to possess such a character, and connected with such organs as our eyes and ears, that it can learn more of the contemplated characters of things, their colours, shapes, etc., than is possible to a being which has no such organs, or such consciousness; and moreover one which can contemplate things without confusion or error, not like the minor unlucky variations we call colour-blind persons. But as for the categories or other *a priori* parts of knowledge, if any such there be, no successful variation is needed to secure experience of these, at least within the history of the living or the knowing being. These successful variations were secured, if such language is at all legitimate, in the purely material world. We need no happy thought of causality in order to understand our world. The operation of our mental processes according to that pattern is its inheritance from its non-mental ancestry. It is part of the constitution of our brains and enjoyed therefore by our minds. On the contrary it would be the first condition of insuccess to vary from this pattern, to have a mind which enjoys no continuity, a state to which our failures in the shape of insane persons afford approximations. In this sense it is true in the famous phrase that the categories are the conditions without which no experience is possible. They are not fortunate variations of knowing. Besides the fortunate invention of knowing itself, *i.e.* a consciousness responsive in its processes to the world of things, the fortunate variations in the history of consciousness are those not phylogenetic but ontogenetic ones, which constitute scientific or musical or other endowments, by which a larger discovery is possible

not of the pervasive forms of existence but of its empirical facts : the turn of brain or mind which invents hypotheses of gravitation or the Choral Symphony or the like.

9. *Categories and Empirical Characters.*—Thus the categories are those characters of things which we both enjoy and contemplate. Except our own distinctive consciousness which we enjoy, all other characters we only contemplate and therefore do not experience from the inside. But though in material things we contemplate their categorial characters, those characters are characters of the distinctive nature of things which we only contemplate and may be said therefore to be enjoyed by them. Thus material things are coloured or sonorous, but themselves 'enjoy' not only their colours but their categorial characters. It is only in these categorial characters, which we can enjoy in ourselves and contemplate in them, that we can penetrate into their private existence. This is why the primary qualities of things, which are the spatial and temporal characters of their sensible qualities, have a predominant importance for us, why we rightly regard them as fundamental. All that we can do with regard to their secondary or distinctive qualities is to note them as they come before us for contemplation, and to discover if we can what relation their intensive quantity bears to the extensive spatial characters which they share with us and other things. We can in other words try to discover the relation between them and the categorial characters. But what colour is to the thing which is coloured we cannot know from the inside. Hence when Locke in a well-known passage declared that, were our senses sufficiently acute to detect the primary qualities of the minute particles of which things are composed, the secondary qualities would disappear, he was abolishing from the world all characters but the categorial ones. We may consider the vibrations or other internal motions of bodies, but there still remains the single pulse of distinctive enjoyment into which those vibrations are "condensed," and which appears to our contemplation as colour. Hence it is not without reason that M. Bergson in the course of a highly suggestive passage,¹ speaking from his own point of view, declares that if we could slow down the rhythm in which these vibrations are presented to our apprehension, the colour though diluted would remain.

Among the characters which we can only contemplate and not enjoy, which therefore we cannot know from the inside is life itself. This may sound paradoxical, since we

¹ *Matière et Mémoire*, ch. iv. p. 226.

are commonly said to enjoy our lives; but strictly speaking we only contemplate life in ourselves just as we do in plants, which I suppose not to be conscious. When we enjoy our lives what we enjoy, in the technical sense of this paper, is the conscious process which has that life for its object. It is our living bodies which in this strict sense enjoy life, experience it from the inside. We in our consciousness contemplate it as much as we contemplate the colour of our hands. But it is even more important to note that life is a distinctive character of living beings which we may describe by its contemplated features of irritability and reaction or analyse as far as we can into its chemical and physical foundations, but whose distinctive enjoyment is neither to be identified with these underlying characters on the one hand nor with the distinctive character of consciousness which in turn is founded upon it. As colour to its underlying primary qualities, so is life related to its underlying chemical and physical processes, processes among things which have all the distinctive characters, colour, taste and the like, of the material world. The enjoyment which is life, as experienced by those beings which have attained to life and have not advanced beyond, is the single pulse in which its underlying activities are condensed. And in like manner consciousness itself represents a condensation into this peculiar enjoyment of what as contemplated must be described as mere complication of nervous processes. Just as, to take a parallel from another sphere, the king reposes upon the substructure of the whole State, which his kingship sums up and condenses, but that kingship is not exhausted by all the functions of the State which sooner or later converge upon his person.

10. *Problems.*—Metaphysics has not only to discover the pervasive characters of things, but their relation to one another and to the distinctive characters of the several orders of existence. In the first place it would ask whether the fundamental or categorial characters are independent, or some primary and some secondary. In doing so it would come straight upon the old question of the nature of being itself. Is time for instance the real tissue of things? Or space? Or both? It would ask what the enumeration of the categories is. And one result would seem to stand out from the method of this paper. Since the categories are the characters which are carried up from level to level, and there are no more in mental enjoyment than in life or matter, their number is not increased by further knowledge nor grows in the evolution of things. That evolution has

for its office to bring out new things with their distinctive character. By doing so it will bring to light distinctive features of things which have hitherto been unrevealed. We might easily imagine a being with more sense organs than man, and therefore sensitive to physical properties which we cannot know. But this will add to empirical or *a posteriori* experience but will not add to nature a single fundamental. From this point of view it is a cardinal mistake to regard the development of the world as Hegel did as an evolution of categories. It is an evolution of forms of distinctive existence.

Next it would seem therefore that quality is not a category. For although every finite thing has a distinctive quality, there is no identical quality which belongs to them all in the same sense as all things are spatial or occupy time. Quality has categorial character so far as it possesses intensive quantity or degree (as indeed Kant admits). And lastly that quality or the distinctive character which the forms of existence do not share with other forms represents the differentiating element in the constitution of the world. It is the element of finitude somehow introduced into the infinite foundations of things, and it would be the business of a profounder study than this to explain the secret of this breaking up of the whole continuum into these "finite centres" of existence.

II.—DOES MORAL PHILOSOPHY REST ON A MISTAKE ?

BY H. A. PRICHARD.

PROBABLY to most students of Moral Philosophy there comes a time when they feel a vague sense of dissatisfaction with the whole subject. And the sense of dissatisfaction tends to grow rather than to diminish. It is not so much that the positions, and still more the arguments, of particular thinkers seem unconvincing, though this is true. It is rather that the aim of the subject becomes increasingly obscure. "What," it is asked, "are we really going to learn by Moral Philosophy?" "What are books on Moral Philosophy really trying to show, and when their aim is clear, why are they so unconvincing and artificial?" And again: "Why is it so difficult to substitute anything better?" Personally, I have been led by growing dissatisfaction of this kind to wonder whether the reason may not be that the subject, at any rate as usually understood, consists in the attempt to answer an improper question. And in this article, I shall venture to contend that the existence of the whole subject, as usually understood, rests on a mistake, and on a mistake parallel to that on which rests, as I think, the subject usually called the Theory of Knowledge.

If we reflect on our own mental history or on the history of the subject, we feel no doubt about the nature of the demand which originates the subject. Any one who, stimulated by education, has come to feel the force of the various obligations in life, at some time or other comes to feel the irksomeness of carrying them out, and to recognise the sacrifice of interest involved; and, if thoughtful, he inevitably puts to himself the question: "Is there really a reason why I should act in the ways in which hitherto I have thought I ought to act? May I not have been all the time under an illusion in so thinking? Should not I really be justified in simply trying to have a good time?" Yet, like Glaucon, feeling that somehow he ought after all to act in these ways, he asks for a *proof* that this feeling is justified. In other

words, he asks "Why should I do these things?" and his and other people's moral philosophising is an attempt to supply the answer, *i.e.* to supply by a process of reflexion a proof of the truth of what he and they have prior to reflexion believed immediately or without proof. This frame of mind seems to present a close parallel to the frame of mind which originates the Theory of Knowledge. Just as the recognition that the doing of our duty often vitally interferes with the satisfaction of our inclinations leads us to wonder whether we really ought to do what we usually call our duty, so the recognition that we and others are liable to mistakes in knowledge generally leads us, as it did Descartes, to wonder whether hitherto we may not have been always mistaken. And just as we try to find a proof, based on the general consideration of action and of human life, that we ought to act in the ways usually called moral, so we, like Descartes, propose by a process of reflexion on our thinking to find a test of knowledge, *i.e.* a principle by applying which we can show that a certain condition of mind was really knowledge, a condition which *ex hypothesi* existed independently of the process of reflexion.

Now, how has the moral question been answered? So far as I can see, the answers all fail, and fall from the necessities of the case, into one of two species. *Either* they state that we ought to do so and so, because, as we see when we fully apprehend the facts, doing so will be for our good, *i.e.* really, as I would rather say, for our advantage, or, better still, for our happiness; *or* they state that we ought to do so and so, because something realised either in or by the action is good. In other words, the reason 'why' is stated in terms either of the agent's happiness or of the goodness of something involved in the action.

To see the prevalence of the former species of answer, we have only to consider the history of Moral Philosophy. To take obvious instances, Plato, Butler, Hutcheson, Paley, Mill, each in his own way seeks at bottom to convince the individual that he ought to act in so-called moral ways by showing that to do so will really be for his happiness. Plato is perhaps the most significant instance, because of all philosophers he is the one to whom we are least willing to ascribe a mistake on such matters, and a mistake on his part would be evidence of the deep-rootedness of the tendency to make it. To show that Plato really justifies morality by its profitableness, it is only necessary to point out (1) that the very formulation of the thesis to be met, *viz.*, that justice is ἀλλότριον ἀγαθόν, implies that any refutation must consist in

showing that justice is *οἰκειον ἀγαθόν*, i.e. really, as the context shows, one's own advantage, and (2) that the term *λυσitteλeiv* supplies the keynote not only to the problem but also to its solution.

The tendency to justify acting on moral rules in this way is natural. For if, as often happens, we put to ourselves the question "Why should we do so and so?" we are satisfied by being convinced either that the doing so will lead to something which we want (e.g. that taking certain medicine will heal our disease), or that the doing so itself, as we see when we appreciate its nature, is something that we want or should like, e.g. playing golf. The formulation of the question implies a state of unwillingness or indifference towards the action, and we are brought into a condition of willingness by the answer. And this process seems to be precisely what we desire when we ask, e.g., "Why should we keep our engagements to our own loss?" for it is just the fact that the keeping our engagements runs counter to the satisfaction of our desires which produced the question.

The answer is, of course, not an answer, for it fails to convince us that we ought to keep our engagements; even if successful on its own lines, it only makes us *want* to keep them. And Kant was really only pointing out this fact when he distinguished hypothetical and categorical imperatives, even though he obscured the nature of the fact by wrongly describing his so-called 'hypothetical imperatives' as imperatives. But if this answer be no answer, what other can be offered? Only, it seems, an answer which bases the obligation to do something on the *goodness* either of something to which the act leads or of the act itself. Suppose, when wondering whether we really ought to act in the ways usually called moral, we are told as a means of resolving our doubt that those acts are right which produce happiness. We at once ask "Whose happiness?" If we are told "Our own happiness," then, though we shall lose our hesitation to act in these ways, we shall not recover our sense that we ought to do so. But how can this result be avoided? Apparently, only by being told one of two things; *either* that any one's happiness is a thing good in itself, and that *therefore* we ought to do whatever will produce it, *or* that the working for happiness is itself good, and that the intrinsic goodness of such an action is the reason why we ought to do it. The advantage of this appeal to the goodness of something consists in the fact that it avoids reference to desire, and, instead, refers to something impersonal and objective. In this way it seems possible to avoid the resolution of

obligation into inclination. But just for this reason it is of the essence of the answer, that, to be effective, it must neither include nor involve the view that the apprehension of the goodness of anything necessarily arouses the desire for it. Otherwise the answer resolves itself into a form of the former answer by substituting desire or inclination for the sense of obligation, and in this way it loses what seems its special advantage.

Now it seems to me that both forms of this answer break down, though each for a different reason.

Consider the first form. It is what may be called Utilitarianism in the generic sense in which what is good is not limited to pleasure. It takes its stand upon the distinction between something which is not itself an action but which can be produced by an action and the action which will produce it, and contends that if something which is not an action is good, then we *ought* to undertake the action which will, directly or indirectly, originate it.¹

But this argument, if it is to restore the sense of obligation to act, must presuppose an intermediate link, *viz.*, the further thesis that what is good ought to be.² The necessity of this link is obvious. An 'ought,' if it is to be derived at all, can only be derived from another 'ought'. Moreover this link tacitly presupposes another, *viz.*, that the apprehension that something good which is not an action ought to be involves just the feeling of imperativeness or obligation which is to be aroused by the thought of the action which will originate it. Otherwise the argument will not lead us to feel the obligation to produce it by the action. And, surely, both this link and its implication are false.³ The word 'ought' refers to actions and to actions alone. The proper language is never "So and so ought to be," but "I ought to do so and so". Even if we are sometimes moved to say that the world or something in it is not what it ought to be, what we really mean is that God or some human being has not made something what he ought to have made it. And it is merely stating another side of this fact to urge that we can only feel the imperativeness upon us of something which is in our power; for it is actions and actions alone which, directly at least, are in our power.

¹ Cf. Dr. Rashdall's *Theory of Good and Evil*, vol. i., p. 138.

² Dr. Rashdall, if I understand him rightly, supplies this link (cf. *Theory of Good and Evil*, vol. i., pp. 135-136).

³ When we speak of anything, *e.g.* of some emotion or of some quality of a human being, as good, we never dream in our ordinary consciousness of going on to say that therefore it ought to be.

Perhaps, however, the best way to see the failure of this view is to see its failure to correspond to our actual moral convictions. Suppose we ask ourselves whether our sense that we ought to pay our debts or to tell the truth arises from our recognition that in doing so we should be originating something good, *e.g.*, material comfort in A or true belief in B, *i.e.*, suppose we ask ourselves whether it is this aspect of the action which leads to our recognition that we ought to do it. We, at once, and without hesitation answer 'No'. Again, if we take as our illustration our sense that we ought to act justly as between two parties, we have, if possible, even less hesitation in giving a similar answer; for the balance of resulting good may be, and often is, not on the side of justice.

At best it can only be maintained that there is this element of truth in the Utilitarian view that unless we recognised that something which an act will originate is good, we should not recognise that we ought to do the action. Unless we thought knowledge a good thing, it may be urged, we should not think that we ought to tell the truth; unless we thought pain a bad thing, we should not think the infliction of it, without special reason, wrong. But this is not to imply that the badness of error is the reason why it is wrong to lie, or the badness of pain the reason why we ought not to inflict it without special cause.¹

It is, I think, just because this form of the view is so plainly at variance with our moral consciousness, that we become driven to adopt the other form of the view, *viz.*, that the act is good in itself and that its intrinsic goodness is the reason why it ought to be done. It is this form which has always made the most serious appeal; for the goodness of the act itself seems more closely related to the obligation to do it than that of its mere consequences or results, and therefore, if obligation is to be based on the goodness of something, it would seem that this goodness should be that of the act itself. Moreover, the view gains plausibility from the fact that moral actions are most conspicuously those to which the term 'intrinsically good' is applicable.

Nevertheless this view, though perhaps less superficial, is equally untenable. For it leads to precisely the dilemma which faces every one who tries to solve the problem raised

¹ It may be noted that if the badness of pain were the reason why we ought not to inflict pain on another, it would equally be a reason why we ought not to inflict pain on ourselves; yet, though we should allow the wanton infliction of pain on ourselves to be foolish, we should not think of describing it as wrong.

by Kant's theory of the good will. To see this, we need only consider the nature of the acts to which we apply the term 'intrinsically good'.

There is, of course, no doubt that we approve and even admire certain actions, and also that we should describe them as good, and as good in themselves. But it is, I think, equally unquestionable that our approval and our use of the term 'good' is always in respect of the motive and refers to actions which have been actually done and of which we think we know the motive. Further, the actions of which we approve and which we should describe as intrinsically good are of two and only two kinds. They are either actions in which the agent did what he did because he thought he ought to do it, or actions of which the motive was a desire prompted by some good emotion, such as gratitude, affection, family feeling, or public spirit, the most prominent of such desires in books on Moral Philosophy being that ascribed to what is vaguely called benevolence. For the sake of simplicity I omit the case of actions done partly from some such desire and partly from a sense of duty; for even if all good actions are done from a combination of these motives, the argument will not be affected. The dilemma is this. If the motive in respect of which we think an action good is the sense of obligation, then so far from the sense that we ought to do it being derived from our apprehension of its goodness, our apprehension of its goodness will presuppose the sense that we ought to do it. In other words, in this case the recognition that the act is good will plainly *presuppose* the recognition that the act is right, whereas the view under consideration is that the recognition of the goodness of the act *gives rise* to the recognition of its rightness. On the other hand, if the motive in respect of which we think an action good is some intrinsically good desire, such as the desire to help a friend, the recognition of the goodness of the act will equally fail to give rise to the sense of obligation to do it. For we cannot feel that we ought to do that the doing of which is *ex hypothesi* prompted solely by the desire to do it.¹

The fallacy underlying the view is that while to base the rightness of an act upon its intrinsic goodness implies that the goodness in question is that of the motive, in reality the rightness or wrongness of an act has nothing to do with any question of motives at all. For, as any instance will show, the rightness of an action concerns an action not in

¹ It is, I think, on this latter horn of the dilemma that Martineau's view falls; cf. *Types of Ethical Theory*, part ii., book i.

the fuller sense of the term in which we include the motive in the action, but in the narrower and commoner sense in which we distinguish an action from its motive and mean by an action merely the conscious origination of something, an origination which on different occasions or in different people may be prompted by different motives. The question "Ought I to pay my bills?" really means simply "Ought I to bring about my tradesmen's possession of what by my previous acts I explicitly or implicitly promised them?" There is, and can be, no question of whether I ought to pay my debts from a particular motive. No doubt we know that if we pay our bills we shall pay them with a motive, but in considering whether we ought to pay them we inevitably think of the act in abstraction from the motive. Even if we knew what our motive would be if we did the act, we should not be any nearer an answer to the question.

Moreover, if we eventually pay our bills from fear of the county court, we shall still have done *what* we ought, even though we shall not have done it *as* we ought. The attempt to bring in the motive involves a mistake similar to that involved in supposing that we can will to will. To feel that I ought to pay my bills is to be *moved towards* paying them. But what I can be moved towards must always be an action and not an action in which I am moved in a particular way, *i.e.* an action from a particular motive; otherwise I should be moved towards being moved, which is impossible. Yet the view under consideration involves this impossibility; for it really resolves the sense that I ought to do so and so, into the sense that I ought to be moved to do it in a particular way.¹

So far my contentions have been mainly negative, but they form, I think, a useful, if not a necessary, introduction to what I take to be the truth. This I will now endeavour to state, first formulating what, as I think, is the real nature of our apprehension or appreciation of moral obligations, and then applying the result to elucidate the question of the existence of Moral Philosophy.

The sense of obligation to do, or of the rightness of, an action of a particular kind is absolutely underivative or immediate. The rightness of an action consists in its being the origination of something of a certain kind A in a situation of a certain kind, a situation consisting in a certain relation B of the agent to others or to his own nature. To appreciate its rightness two preliminaries may be necessary. We may

¹ It is of course not denied here that an action done from a particular motive may be *good*; it is only denied that the *rightness* of an action depends on its being done with a particular motive.

have to follow out the consequences of the proposed action more fully than we have hitherto done, in order to realise that in the action we should originate A. Thus we may not appreciate the wrongness of telling a certain story until we realise that we should thereby be hurting the feelings of one of our audience. Again, we may have to take into account the relation B involved in the situation, which we had hitherto failed to notice. For instance, we may not appreciate the obligation to give X a present, until we remember that he has done us an act of kindness. But, given that by a process which is, of course, merely a process of general and not of moral thinking we come to recognise that the proposed act is one by which we shall originate A in a relation B, then we appreciate the obligation immediately or directly, the appreciation being an activity of *moral* thinking. We recognise, for instance, that this performance of a service to X, who has done us a service, just in virtue of its being the performance of a service to one who has rendered a service to the would-be agent, ought to be done by us. This apprehension is immediate, in precisely the sense in which a mathematical apprehension is immediate, *e.g.*, the apprehension that this three-sided figure, in virtue of its being three-sided, must have three angles. Both apprehensions are immediate in the sense that in both insight into the nature of the subject directly leads us to recognise its possession of the predicate; and it is only stating this fact from the other side to say that in both cases the fact apprehended is self-evident.

The plausibility of the view that obligations are not self-evident but need proof lies in the fact that an act which is referred to as an obligation may be incompletely stated, what I have called the preliminaries to appreciating the obligation being incomplete. If, *e.g.*, we refer to the act of repaying X by a present merely as giving X a present, it appears, and indeed is, necessary to give a reason. In other words, wherever a moral act is regarded in this incomplete way the question, "*Why* should I do it?" is perfectly legitimate. This fact suggests, but suggests wrongly, that even if the nature of the act is completely stated, it is still necessary to give a reason, or, in other words, to supply a proof.

The relations involved in obligations of various kinds, are, of course, very different. The relation in certain cases is a relation to others due to a past act of theirs or ours. The obligation to repay a benefit involves a relation due to a past act of the benefactor. The obligation to pay a bill involves a relation due to a past of ours in which we have either said or

implied that we would make a certain return, for something which we have asked for and received. On the other hand the obligation to speak the truth implies no such definite act; it involves a relation consisting in the fact that others are trusting us to speak the truth, a relation the apprehension of which gives rise to the sense that communication of the truth is something owing by us to them. Again the obligation not to hurt the feelings of another, involves no special relation of us to that other, *i.e.*, no relation other than that involved in our both being men and men in one and the same world. Moreover, it seems that the relation involved in an obligation need not be a relation to another at all. Thus we should admit that there is an obligation to overcome our natural timidity or greediness, and that this involves no relations to others. Still there is a relation involved, *viz.*, a relation to our own disposition. It is simply because we can and because others cannot directly modify our disposition that it is our business to improve it, and that it is not theirs, or, at least, not theirs to the same extent.

The negative side of all this is, of course, that we do not come to appreciate an obligation by an *argument*, *i.e.* by a process of non-moral thinking, and that, in particular, we do not do so by an argument of which a premise is the ethical but not moral activity of appreciating the goodness either of the act or of a consequence of the act; *i.e.* that our sense of the rightness of an act is not a conclusion from our appreciation of the goodness either of it or of anything else.

It will probably be urged that on this view our various obligations form, like Aristotle's categories, an unrelated chaos in which it is impossible to acquiesce. For, according to it, the obligation to repay a benefit, or to pay a debt, or to keep a promise, presupposes a previous act of another; whereas the obligation to speak the truth or not to harm another does not; and, again, the obligation to remove our timidity involves no relations to others at all. Yet, at any rate, an effective *argumentum ad hominem* is at hand in the fact that the various qualities which we recognise as good are equally unrelated; *e.g.* courage, humility, and interest in knowledge. If, as is plainly the case, ἀγαθά differ ἢ ἀγαθά, why should not obligations equally differ *qua* their obligatoriness? Moreover if this were not so, there could in the end be only one obligation, which is palpably contrary to fact.¹

¹ Two other objections may be anticipated: (1) that obligations cannot be self-evident, since many actions regarded as obligations by some are not so regarded by others; and (2) that if obligations are self-evident,

Certain observations will help to make the view clearer.

In the first place, it may seem that the view, being—as it is—avowedly put forward in opposition to the view that what is right is derived from what is good, must itself involve the opposite of this, *viz.*, the Kantian position that what is good is based upon what is right, *i.e.*, that an act, if it be good, is good because it is right. But this is not so. For, on the view put forward, the rightness of a right action lies solely in the origination in which the act consists, whereas the intrinsic goodness of an action lies solely in its motive; and this implies that a morally good action is morally good not simply because it is a right action but because it is a right action done because it is right, *i.e.*, from a sense of obligation. And this implication, it may be remarked incidentally, seems plainly true.

In the second place the view involves that when, or rather so far as, we act from a sense of obligation, we have no purpose or end. By a 'purpose' or 'end' we really mean something the existence of which we desire, and desire of the existence of which leads us to act. Usually our purpose is something which the act will originate, as when we turn round in order to look at a picture. But it may be the action itself, *i.e.*, the origination of something, as when we hit a golf ball into a hole or kill some one out of revenge.¹ Now if by a purpose we mean something the existence of which we desire and desire for which leads us to act, then plainly so

the problem of how we ought to act in the presence of conflicting obligations is insoluble.

To the first I should reply:—

(a) That the appreciation of an obligation is, of course, only possible for a developed moral being, and that different degrees of development are possible.

(b) That the failure to recognise some particular obligation is usually due to the fact that, owing to a lack of thoughtfulness, what I have called the preliminaries to this recognition are incomplete.

(c) That the view put forward is consistent with the admission that, owing to a lack of thoughtfulness, even the best men are blind to many of their obligations, and that in the end our obligations are seen to be co-extensive with almost the whole of our life.

To the second objection I should reply that obligation admits of degrees, and that where obligations conflict, the decision of what we ought to do turns not on the question "Which of the alternative courses of action will originate the greater good?" but on the question "Which is the greater obligation?"

¹ It is no objection to urge that an action cannot be its own purpose, since the purpose of something cannot be the thing itself. For, speaking strictly, the purpose is not the *action's* purpose but *our* purpose, and there is no contradiction in holding that our purpose in acting may be the action.

far as we act from a sense of obligation, we have no purpose, consisting either in the action itself or in anything which it will produce. This is so obvious that it scarcely seems worth pointing out. But I do so for two reasons. (1) If we fail to scrutinise the meaning of the terms 'end' and 'purpose,' we are apt to assume uncritically that all deliberate action, *i.e.*, action proper, must have a purpose; we then become puzzled both when we look for the purpose of an action done from a sense of obligation, and also when we try to apply to such an action the distinction of means and end, the truth all the time being that since there is no end, there is no means either. (2) The attempt to base the sense of obligation on the recognition of the goodness of something is really an attempt to find a purpose in a moral action in the shape of something good which, as good, we want. And the expectation that the goodness of something underlies an obligation disappears as soon as we cease to look for a purpose.

The thesis, however, that, so far as we act from a sense of obligation, we have no purpose must not be misunderstood. It must not be taken either to mean or to imply that so far as we so act we have no *motive*. No doubt in ordinary speech the words 'motive' and 'purpose' are usually treated as correlatives, 'motive' standing for the desire which induces us to act, and 'purpose' standing for the object of this desire. But this is only because, when we are looking for the motive of some action, say some crime, we are usually presupposing that the act in question is prompted by a desire and not by the sense of obligation. At bottom, however, we mean by a motive what moves us to act; a sense of obligation does sometimes move us to act; and in our ordinary consciousness we should not hesitate to allow that the action we were considering might have had as its motive a sense of obligation. Desire and the sense of obligation are co-ordinate forms or species of motive.

In the third place, if the view put forward be right, we must sharply distinguish morality and virtue as independent, though related, species of goodness, neither being an aspect of something of which the other is an aspect, nor again a form or species of the other, nor again something deducible from the other; and we must at the same time allow that it is possible to do the same act either virtuously or morally or in both ways at once. And surely this is true. An act, to be virtuous, must, as Aristotle saw, be done willingly or with pleasure; as such it is just not done from a sense of obligation but from some desire which is intrinsically good, as arising from some intrinsically good emotion. Thus in an

act of generosity the motive is the desire to help another arising from sympathy with that other; in an act which is courageous and no more, *i.e.* in an act which is not at the same time an act of public spirit or family affection or the like, we prevent ourselves from being dominated by a feeling of terror, desiring to do so from a sense of shame at being terrified. The goodness of such an act is different from the goodness of an act to which we apply the term moral in the strict and narrow sense, *viz.* an act done from a sense of obligation. Its goodness lies in the intrinsic goodness of the emotion and the consequent desire under which we act, the goodness of this motive being different from the goodness of the moral motive proper, *viz.*, the sense of duty or obligation. Nevertheless, at any rate in certain cases, an act can be done either virtuously or morally or in both ways at once. It is possible to repay a benefit either from desire to repay it or from the feeling that we ought to do so or from both motives combined. A doctor may tend his patients either from a desire arising out of interest in his patients or in the exercise of skill or from a sense of duty, or from a desire and a sense of duty combined. Further, although we recognise that in each case the act possesses an intrinsic goodness, we regard that action as the best in which both motives are combined; in other words, we regard as the really best man the man in whom virtue and morality are united.

It may be objected that the distinction between the two kinds of motive is untenable on the ground that the *desire* to repay a benefit, for example, is only the manifestation of that which manifests itself as the *sense of obligation* to repay whenever we think of something in the action which is other than the repayment and which we should not like, such as the loss or pain involved. Yet the distinction can, I think, easily be shown to be tenable. For, in the analogous case of revenge, the desire to return the injury and the sense that we ought not to do so, leading, as they do, in opposite directions, are plainly distinct; and the obviousness of the distinction here seems to remove any difficulty in admitting the existence of a parallel distinction between the desire to return a benefit and the sense that we ought to return it.¹

¹ This sharp distinction of virtue and morality as co-ordinate and independent forms of goodness will explain a fact which otherwise it is difficult to account for. If we turn from books on Moral Philosophy to any vivid account of human life and action such as we find in Shakespeare, nothing strikes us more than the comparative remoteness of the discussions of Moral Philosophy from the facts of actual life. Is not this largely because, while Moral Philosophy has, quite rightly, concentrated its attention on the fact of obligation, in the case of many of those whom we

Further the view implies that an obligation can no more be based on or derived from a virtue than a virtue can be derived from an obligation, in which latter case a virtue would consist in carrying out an obligation. And the implication is surely true and important. Take the case of courage. It is untrue to urge that, since courage is a virtue, we ought to act courageously. It is and must be untrue, because, as we see in the end, to feel an obligation to act courageously would involve a contradiction. For, as I have urged before, we can only feel an obligation to *act*; we cannot feel an obligation to *act from a certain desire*, in this case the desire to conquer one's feelings of terror arising from the sense of shame which they arouse. Moreover, if the sense of obligation to act in a particular way leads to an action, the action will be an action done from a sense of obligation, and therefore not, if the above analysis of virtue be right, an act of courage.

The mistake of supposing that there can be an obligation to act courageously seems to arise from two causes. In the first place, there is often an obligation to do that which involves the conquering or controlling our fear in the doing of it, *e.g.*, the obligation to walk along the side of a precipice to fetch a doctor for a member of our family. Here the acting on the obligation is externally, though only externally, the same as an act of courage proper. In the second place there is an obligation to acquire courage, *i.e.*, to do such things as will enable us afterwards to act courageously, and this may be mistaken for an obligation to act courageously. The same considerations can, of course, be applied, *mutatis mutandis*, to the other virtues.

The fact, if it be a fact, that virtue is no basis for morality will explain what otherwise it is difficult to account for, *viz.*, the extreme sense of dissatisfaction produced by a close reading of Aristotle's *Ethics*. Why is the *Ethics* so disappointing? Not, I think, because it really answers two radically different questions as if they were one: (1) "What is the happy life?" (2) "What is the virtuous life?" It is, rather, because Aristotle does not do what we as Moral Philosophers want him to do, *viz.*, to convince us that we really ought to do what in our non-reflective consciousness we have hitherto believed we ought to do, or, if not, to tell us what, if any, are the other things which we really ought to do, and to prove to us that he is right. Now, if what I have just been contending

admire most and whose lives are of the greatest interest, the sense of obligation, though it may be an important, is not a dominating factor in their lives?

is true, a systematic account of the virtuous character cannot possibly satisfy this demand. At best it can only make clear to us the details of one of our obligations, *viz.*, the obligation to make ourselves better men; but the achievement of this does not help us to discover what we ought to do in life as a whole and why; to think that it did would be to think that our only business in life was self-improvement. Hence it is not surprising that Aristotle's account of the good man strikes us as almost wholly of academic value, with little relation to our real demand, which is formulated in Plato's words: οὐ γὰρ περὶ τοῦ ἐπιτύχοντος ὁ λόγος, ἀλλὰ περὶ τοῦ ὄντινα τρόπον χρῆζην.

I am not, of course, *criticising* Aristotle for failing to satisfy this demand, except so far as here and there he leads us to think that he intends to satisfy it. For my main contention is that the demand cannot be satisfied and cannot be satisfied because it is illegitimate. Thus we are brought to the question: "Is there really such a thing as Moral Philosophy, and, if there is, in what sense?"

We should first consider the parallel case—as it appears to be—of the Theory of Knowledge. As I urged before, at some time or other in the history of all of us, if we are thoughtful, the frequency of our own and of others' mistakes is bound to lead to the reflexion that possibly we and others have *always* been mistaken in consequence of some radical defect of our faculties. In consequence certain things which previously we should have said without hesitation that we *knew*, as, *e.g.*, that $4 \times 7 = 28$, become subject to doubt; we become able only to say that we thought we knew these things. We inevitably go on to look for some general procedure by which we can ascertain that a given condition of mind is really one of knowledge. And this involves the search for a criterion of knowledge, *i.e.* for a principle by applying which we can settle that a given state of mind is really knowledge. The search for this criterion and the application of it, when found, is what is called the Theory of Knowledge. The search implies that instead of its being the fact that the knowledge that A is B is obtained directly by consideration of the nature of A and B, the knowledge that A is B, in the full or complete sense, can only be obtained by first knowing that A is B, and then knowing that we knew it, by applying a criterion, such as Descartes' principle that what we clearly and distinctly conceive is true.

Now it is easy to show that the doubt whether A is B based on this speculative or general ground, could, if genuine, never be set at rest. For if, in order really to know that A is B,

we must first know that we knew it, then really to know that we knew it, we must first know that we knew that we knew it. But—what is more important—it is also easy to show that this doubt is not a genuine doubt but rests on a confusion the exposure of which removes the doubt. For when we *say* we doubt whether our previous condition was one of knowledge, what we *mean*, if we mean anything at all, is that we doubt whether our previous *belief* was *true*, a belief which we should express as the *thinking* that A is B. For in order to doubt whether our previous condition was one of knowledge, we have to think of it not as knowledge but as only belief, and our only question can be "Was this belief true?" But as soon as we see that we are thinking of our previous condition as only one of belief, we see that what we are now doubting is not what we first *said* we were doubting, *viz.*, whether a previous condition of knowledge was really knowledge. Hence, to remove the doubt, it is only necessary to appreciate the real nature of our consciousness in apprehending, *e.g.*, that $7 \times 4 = 28$, and thereby see that it was no mere condition of believing but a condition of knowing, and then to notice that in our subsequent doubt what we are really doubting is not whether this consciousness was really knowledge, but whether a consciousness of another kind, *viz.* a belief that $7 \times 4 = 28$, was true. We thereby see that though a doubt based on speculative grounds is possible, it is *not* a doubt concerning what we believed the doubt concerned, and that a doubt concerning this latter is impossible.

Two results follow. In the first place, if, as is usually the case, we mean by the 'Theory of Knowledge' the knowledge which supplies the answer to the question "Is what we have hitherto thought knowledge really knowledge?" there is and can be no such thing, and the supposition that there can is simply due to a confusion. There can be no answer to an illegitimate question, except that the question is illegitimate. Nevertheless the question is one which we continue to put until we realise the inevitable immediacy of knowledge. And it is positive knowledge that knowledge is immediate and neither can be, nor needs to be, improved or vindicated by the further knowledge that it was knowledge. This positive knowledge sets at rest the inevitable doubt, and, so far as by the 'Theory of Knowledge' is meant this knowledge, then even though this knowledge be the knowledge that there is no Theory of Knowledge in the former sense, to that extent the Theory of Knowledge exists.

In the second place, suppose we come genuinely to doubt whether, *e.g.*, $7 \times 4 = 28$ owing to a genuine doubt whether

we were right in believing yesterday that $7 \times 4 = 28$, a doubt which can in fact only arise if we have lost our hold of, *i.e.* no longer remember, the real nature of our consciousness of yesterday, and so think of it as consisting in believing. Plainly, the only remedy is to do the sum again. Or, to put the matter generally, if we do come to doubt whether it is true that A is B, as we once thought, the remedy lies not in any process of reflexion but in such a reconsideration of the nature of A and B as leads to the knowledge that A is B.

With these considerations in mind, consider the parallel which, as it seems to me, is presented—though with certain differences—by Moral Philosophy. The sense that we ought to do certain things arises in our unreflective consciousness, being an activity of moral thinking occasioned by the various situations in which we find ourselves. At this stage our attitude to these obligations is one of unquestioning confidence. But inevitably the appreciation of the degree to which the execution of these obligations is contrary to our interest raises the doubt whether after all these obligations are really obligatory, *i.e.*, whether our sense that we ought not to do certain things is not illusion. We then want to have it *proved* to us that we ought to do so, *i.e.*, to be convinced of this by a process which, as an argument, is different in kind from our original and unreflective appreciation of it. This demand is, as I have argued, illegitimate.

Hence in the first place, if, as is almost universally the case, by Moral Philosophy is meant the knowledge which would satisfy this demand, there is no such knowledge, and all attempts to attain it are doomed to failure because they rest on a mistake, the mistake of supposing the possibility of proving what can only be apprehended directly by an act of moral thinking. Nevertheless the demand, though illegitimate, is inevitable until we have carried the process of reflexion far enough to realise the self-evidence of our obligations, *i.e.*, the immediacy of our apprehension of them. This realisation of their self-evidence is positive knowledge, and so far, and so far only, as the term Moral Philosophy is confined to this knowledge and to the knowledge of the parallel immediacy of the apprehension of the goodness of the various virtues and of good dispositions generally, is there such a thing as Moral Philosophy. But since this knowledge may allay doubts which often affect the whole conduct of life, it is, though not extensive, important and even vitally important.

In the second place, suppose we come genuinely to doubt whether we ought, for example, to pay our debts owing to a genuine doubt whether our previous conviction that we

ought to do so is true, a doubt which can, in fact, only arise if we fail to remember the real nature of what we now call our past conviction. The only remedy lies in actual getting into a situation which occasions the obligation, or—if our imagination be strong enough—in imagining ourselves in that situation, and then letting our moral capacities of thinking do their work. Or, to put the matter generally, if we do doubt whether there is really an obligation to originate A in a situation B, the remedy lies not in any process of general thinking, but in getting face to face with a particular instance of the situation B, and then directly appreciating the obligation to originate A in that situation.

III.—THE MEANING OF MYSTICISM AS SEEN THROUGH ITS PSYCHOLOGY.

BY WILLIAM ERNEST HOCKING.

METAPHYSICS has all but ceased to draw water from the copious historic well of mysticism; theology with growing conviction warns against it: but to-day psychology begins to come in their place,—first of course simply as an analyst, yet often lingering as something more than an analyst. What psychology inclines to appreciate is not wholly the same as that which the others have first drunk, then tasted, then thrown away. They were naturally interested in mysticism for the sake of its theory or doctrine; and the doctrine which they have thus far got from it has proved unsound beyond defence. It is one of the clear achievements of philosophy to have diagnosed and refuted this negative theory of reality, which crowns as its absolute the vanishing object of an experience approaching perfect immediacy. This work does not need to be done over again. But psychology, looking with a different interest, may find that the whole meaning of mysticism has not been exhausted in this discarded doctrine.

Psychology looks first to the experience and its effects, more or less careless of its objects or lack of objects: sometimes it seems to intimate that the objects make no difference, the essence of religion being in the experience as subjective fact; but without falling into that gratuitous and damnable mistake, we may well believe that for finding the meaning of mysticism psychology has advantages. For where self-expression falters the signs of meaning may still be read in causes and effects. The thread of meaning, often lost to the mystic himself in his ecstatic moment, may at that very moment appear, so to speak, on the reverse of the cloth, as something accomplished in the active disposition of the subject. Self-interpretation has always been a weak point in mysticism: it has never done well to put its speculative foot forward: eloquent in psychology, it is a stammerer in metaphysics. Many of its negative speculations are con-

fessions of theoretic failure parading as dogmatic results. On its noetic side relatively helpless and plastic, mysticism has lived under all religions,—hence with the stamp of various metaphysical conceptions. Have there not been mystics within orthodox Christianity, a religion in no sense a partisan of the 'abstract universal'? We should then be nearer the historic truth, as well as more liberal, to regard mysticism first as an experience, and let its metaphysics come as a resultant, an inference, a presupposition. There is a minimum of theory without which mysticism cannot develop even as an experience,—perhaps this; that God is one, and that it is possible to be one with him. Beyond this minimum, it is a community of experience that unites the mystics rather than any community of explicit doctrine.

But it will be still nearer the truth, I believe, to regard mysticism (primarily) neither as a metaphysics, nor as an experience, but as an art: namely, as the fine art, almost the lost art, of worship. Historically the mystics are those who have carried the common art of worship to the degree of virtuosoship, they are those who have won eminent experimental knowledge of the way to God. And their technique which is the refinement of worship, often the exaggeration of worship, is at the same time the essence of all worship. In the course of their devotions the mystics report that remarkable experiences have befallen them, and that equally remarkable cognitions have come to them: but these have taken them, as it were, by surprise,—they are by-products of their deeds, not their great ends. The mystic in his own first intention is he who approaches and acknowledges God in an immediate action called worship; and mysticism must be understood by way of this intention.

If this is a true principle of interpretation, it will bring about some revision of what both psychology and metaphysics have hitherto had to say of mysticism. Particularly, it seems to me, would the contribution of psychology be cleared if attention were given first to the motive of the mystic as an active individual, and then only secondarily to the various phenomena of the ecstasy of the mystic as a passive individual. The conception of the 'mystical experience' must widen out, to include its intentional backbone; for the continuity of motive is the only thing that can determine the identity of the experience, and afford a definite ground for separating the abnormal from the normal.¹ And further,

¹ It may be true, and I believe that it is true, that the motive presupposes an experience (in the relatively passive sense), i.e., that the impulse to worship God, whatever that may mean, is due to some per-

in the purpose and motive of the mystic we have the point at which the metaphysical (and ethical) judgment of mysticism naturally joins the work of psychology and completes it. The bold intention of the mystic to establish some immediate conscious relation with the most Real, and his firm belief in his own experience as fulfilling his intention, make it necessary for psychology and epistemology to work closely together in interpreting that experience. A revision in the one must bring about a revision in the other. It is the purpose of this article to contribute a few positive theses, chiefly to the psychology of mysticism, to its metaphysics only by implication. But first I have to record more definitely the ground of my objection to the prevailing metaphysical interpretation.

I.

In recent years no chapter from the metaphysical side has contributed so much to our grasp of mysticism as that of Royce in *The World and the Individual*. It is by no means a treatment which neglects the psychology of the mystic; I doubt whether any writer since Hegel has so powerfully combined in his account of mysticism the psychological and the metaphysical elements. He exhibits it as a doctrine about Reality, but as a doctrine which is at the same time a report of experience. In his refutation of mysticism, however, he is concerned solely with speculative mysticism, which he regards (I think wrongly) as "the truly significant historical mysticism".¹ The experience of the mystic has

ception of God as already in a degree present. The impulse of worship in its more instinctive forms is quite analogous to the quick movement of the mind toward the source of an agreeable or emotionally warming suggestion, to increase it, to lift as much of it as possible out of the region of idea into the region of empirical presence. But as experience may determine motive, so motive in turn develops experience: the two factors are in continuous and instantaneous interaction during the whole movement of consciousness to its culmination, and it is only because the initial experience has a value, *i.e.*, takes to itself a motive, that it has a career in consciousness. What I maintain is only that we cannot understand that career apart from the motive, that our notion of the experience must include it.

Apart from reference to the motive we have an important array of explanatory conceptions for the mystical 'experience': auto-suggestion, irruption of the subconscious, hysteria, annihilation of will and hypertrophy of attention, annihilation of attention and hypertrophy of will, erethism of the imagination, *hypertension de l'energie vitale*, etc., etc. How are we to choose and adjust among these, except by a tacit assumption that we already know what mysticism intends?

¹ *The World and the Individual*, vol. i., p. 144.

no meaning for him except as the goal of that particular type of speculation. And as for the purpose of mysticism (which on Royce's own principles ought to be its defining mark), this purpose is not invoked to explain either the peculiar experience or the peculiar theory. Royce does not appear to distinguish the mystic's motive from the motive of speculation in general, the motive which the mystic has in common with the realist, the motive drawn from the defects of that (wonderfully depicted) "finite situation that sends us all alike looking for true Being". In so far as mystic and realist alike have the intention not alone to find true Being, but to define it, both must be equally condemned by Royce's proof that "Each in the end defines Nothing whatever".¹ But what if the difference between mystic and realist lay precisely in this point: that the purpose of the mystic is not to define anything at all, but to *do* something which by every device he has tried to differentiate from all processes of defining or of speculating. I believe this to be the case; and that the logic of Royce thus passes over his head. The purpose of the mystic lies in the region of the practice of religion; and his essential theoretical message is, that there is a practical cognition of the Absolute which philosophical knowledge necessarily fails to reach. The point of difference between the mystic and all speculators (including the speculative mystics as speculators) seems to me to be this:—

A philosophy does not supply the thinker *ipso facto* either with the incentive to worship or with the power to worship. Thought may perhaps persuade us of God's immediate presence in experience, and yet it leaves us empty of the idea of 'approach'; it may even exclude such idea (for how can one who is universal be either approached or fled from?). Philosophy finds its Real in the third person, not in the second: it ends in the announcement, "Lo, he is there," not in the address, "Lo, Thou art here". Before that presence, we, as philosophers, stand dumb and awkward,—we have nothing to say. The mystic is he who, finishing his philosophy, or more frequently, anticipating its conclusion, breaks through the film of objectivity involved in the theoretical relation and adopts toward his God the *vocative case*. In that new relation lies all that is distinctive of mysticism.

The possibility of such a relation must of course be provided for also by our philosophy,—or rejected: and especially the possibility, in any such momentary act, of gaining a

¹ *Op. cit.*, p. 180.

knowledge of the Real,—a knowledge which outruns reason, and presents to the subject, prophetically and in an infinite synthesis, the Whole, as in its heart it is. It is to this point that pertinent attack must be directed. In the meantime the mystic, as a rule, does not try to explain *how* these things can be. He calls us to witness that they are so, and are plentifully illustrated in experience. We know well enough the difference in ordinary relations between the realist and the mystic, between the observer of life, and the sharer of it. We know the man to whom Nature, for instance, is a foreign and independent spectacle, and the man who in the presence of Nature readily becomes a part of it. We know the man who in all social situations maintains some fine insulation, some predominance of the self-preserving instinct; and we know the man whose self spontaneously diffuses and mingles with each situation, by some natural osmosis between him and his object. And we know further, that while the former type, the realist in Royce's sense, has a certain advantage in discoursing about his world; the latter type, the mystic, with all his speechlessness has a mode of knowledge of his world, usually of a practical nature, which the less adventurous realist may fail to reach or to understand; a type of knowledge which exhibits also certain anticipatory and creative qualities.

Mysticism as a practical attitude, while it involves cognition, is thus apparently different from discursive thought; it has some priority, even as a means of cognition, over the philosophic accomplishment *at any time accessible*; it seems to effect a *rapprochement* between the individual and his object in its integrity, and thus to look toward its future as well as toward its past: but in any case the defining mark of mysticism lies in this other-than-theoretical relation to the object, this quasi-destruction of objectivity seen quite simply in the conscious transition from 'he' to 'thou'.

It is one thing to point out and illustrate the mystical relation; to analyse it is more difficult. It seems to be a kind of primitive, total apprehension introduced into the region of social and spiritual realities.¹ It seems to apply to reason's own world some more instantaneous equivalent of reason, taken from the resource of the moral man. In

¹ Royce's often-quoted phrase which describes the mystic as the "thorough-going empiricist" is strikingly true of the mystic's method of knowing; but the mystic's peculiarity is that he applies this method to objects which empiricists generally insist *cannot be given in any such immediate, unreasoned manner*, namely to totals—not to elements; to souls—not to sensations; to resultants (like 'history' or 'society') not to factors; and, finally, to God himself.

the attempt to characterise mystical experience, one naturally falls upon such words as "unitary," "total," "immediate"; and then since it is after all unique and fundamental to consciousness, one insists that it is not wholly describable. I am not now interested in pursuing this analysis. What I want to point out is, that these words, unitary, immediate, ineffable, which at all events apply to the mystic's *experience*, are precisely the words which the metaphysician applies to the mystic's *doctrine*. And I suggest that the misinterpretation of mysticism here in question is due to the fact that *what is a psychological report (and a true one) is taken as a metaphysical statement (and a false one)*. From the fact that one's experience of God has been "one, immediate, and ineffable," it does not follow that God himself is merely "one, immediate, and ineffable,"—and so a Being wholly removed from all concrete reality. It is true that this inference from the nature of the experience to the nature of its object is here of the closest order; and it is also true that many a mystic has committed himself to that inference. But it is possible, and necessary, to reject it. Let me attempt to show this.

If the experience is one, its object is one. True: for the unity of an experience is a unity of attention, and unity of attention implies some kind of unity in its object. And so reality must have for knowledge some unitary handle if a unitary experience of it is possible. It must have something like a 'self,' in which it is all represented or *resumed*, so that in the presence of that self we are, for our purposes, in presence of the whole. One's purposes might be satisfied if reality could be resumed in an 'essence' or in a 'formula'; but most mystics either assume or know that reality is resumed in a self of more concrete description. Now while such unity is indeed implied, the mystic is not concerned either to deny or to explain any plurality that may be compatible therewith. An 'immediacy' does not legislate about what is beyond itself either to deny it or to affirm it. Reality may have innumerable branches and growing tips; any such variety is for the moment simply undetermined and out of mind.

If the experience is ineffable, the object is ineffable. True: for every unity, in so far as it is unique, is ineffable: the One has always to be expounded by what it is not,—the many, the singular by the general. A certain formal ineffableness belongs therefore to the object of every unitary experience. But unities, we have just seen, are various in kind and degree. And in so far as the unity of the object has its *kind*, the object escapes from the ineffableness which may still

cleave to the experience. Probably all experience in its immediate quality is incommunicable; but the arts of communication draw infinite material from the region nearer and nearer the heart of this immediacy. Immediacy and idea are not disparate stuff, they are different stages of the same stuff, the same meaning: and the individuals historically most active and fertile in this ideal exploitation of immediacy are none but the poets and mystics themselves. Have the Christian mystics ever refrained from trying to coin their experiences, their 'revelations,' into Latin or Spanish or German? Can we forget the bulky manuscripts of Boehme (who tells us that he spent twelve years in bringing to pen the burden of two such 'ineffable' experiences), or the voluble recitements of Teresa? Consider the state of mind of Angèle de Foligno, of whom it is said that while dictating his revelations to his amanuensis he would frequently break off, crying: "I blaspheme, brother, I blaspheme. All that I have said is nothing;—and there is nothing that I can say,"—and then continue his dictation. Here is no simple ineffableness, but a very double state of mind: a mighty difficulty in expression, together with an even mightier impulse to express. As far, then, as the content of mystical experience is concerned, the word ineffable may often tell but half the truth, and a temporary half-truth, or again, it may wholly apply to that content; but in its first intention it is an expression of psychological difficulty, not rashly to be crystallised into metaphysical doctrine: the two questions are separable.

I judge, then, that the metaphysics of mysticism (for it most certainly has a metaphysics) may be richer and freer than we have been accustomed to think; and that the marks commonly attributed to the mystic absolute are in the first place so many contributions to mystic psychology. I may now turn to consider that psychology on its own ground.

II.

The work of William James is the natural point of departure. For *The Varieties of Religious Experience* is very largely a treatise on religion in its mystical aspect, that is, as unreasoned personal intercourse with unseen reality.¹

¹ Every treatment of the psychology of religion tends for obvious reasons to become a psychology of mysticism; and there were further reasons in James's own temperament why this should be markedly the case with his own work. His interest was held by everything individual, original, and instinctive, especially if it tended to sway away from the

James's main interest is not in explaining religious experience, but in proposing canons for judging it on the basis of its effects: hence his analyses may be broad and summary. Of mystical experience he says simply that it is ineffable and noetic, usually also transient and passive.¹ In adopting the hypothesis of the subconscious as the immediate seat of the activity before which the mystic is passive, he appeals to it only as "a mediating term," as indicating the direction for further research, not as a finished result. Thus he gives the conception, I think, its right place and proportion: for the subconscious is still more in need of illumination than in a position to give it. Whatever else is done toward the psychological interpretation of religious experience is shedding light on the problem of the subconscious; hence I may the more willingly forgo, as I must, any detailed reference to it in this paper. I shall consider first what has been added and is still to be added to James's account of mystical experience, simply as a psychological event; and then, secondly, come to the question of the motive of mysticism.

What James has spoken of as the transiency of the mystical experience may be brought under a wider category,—that of rhythm, or of the alternation of states. That is, the mystic's elevation may be transient *because* it is a phase in an organic wave or sequence of some sort: and if so, it would be of decided advantage to study such wave or sequence in its totality. Any rhythmic movement in experience confesses an organic bond, indicates a causal law, and brings the fact at once within the field of the psycho-physical, offering perhaps the most favourable angle for scientific approach. Suggestions have never been lacking that the mystic's intense experiences are concomitant with certain physiological ups-and-downs, more or less vaguely defined; but the scientific development of these suggestions has been for the first time really begun by recent French students, notably Delacroix and De Montmorand.

The mystic himself is keenly conscious that with the entrance of these experiences his life is bound in a remarkable alternation: but he might well object at the outset to the theory conveyed in the idea of rhythm. For what is this elevation if not the moment of freedom from all ties of

institutional, and to renounce the support of reasons: hence he naturally finds in his net those who make their private way to God, and reach an empirical assurance of their soul's security, apart from the sanction of authority. These are mystics; and this original, untamed, God-seeking element is the mystical element in every religious nature.

¹ *Varieties*, pp. 380-381.

nature? Has he not in his preparation painfully put off these ties, so far as his human will could carry him, and has not the divine power finished the work which he himself could not accomplish? In short, is it not essential to the internal meaning of mysticism that this moment shall be regarded as a moment of just that absolute freedom which the psychologist cannot find anywhere else in nature? I bring up this question in order to point out that quite within the meaning of the mystic there are certain indications that the idea of rhythm need not be so alien thereto as it at first seems. In the first place, he has no positive reason derived from this meaning why his moment of union should pass, and is himself inclined to attribute this transiency to the weakness of nature. Then, again, even in the upward movement, there is a certain justice upon which the mystic depends, which blends with and gives regularity to the grace of God there found. The logic of the relation between the worshipper and his God is indeed wholly personal and particular (not magical), but the worshipper still relies upon a steadfastness in the Being worshipped; he frequently comes to look upon his elevation as a response to the right approach on his part, as some function of the moral condition of his own heart. The words of Plotinus in his letter to Flaccus seem to show well this quasi-natural adjustment of attitude to the supernatural. "But this sublime condition," he writes, "is not of permanent duration. It is only now and then that we can enjoy this elevation (mercifully made possible for us) above the limits of the body and the world. I myself have realised it but three times as yet. . . . All that tends to purify and elevate the mind will assist you in this attainment, and facilitate the approach and the recurrence of these happy intervals."¹ Thus the mystic himself is often disposed to read his experience as a course of interaction between a higher and a lower law. And it is noteworthy that while many a mystic has expressed regret that his joy could not endure, not one (so far as I have found) has expressed surprise. This surprising absence of surprise may indicate that the immediacy of the state is never so complete as to be wholly without fringes,—that some awareness of the empirical self and of its ties remains. The mystic has found himself in a region where the gravitation of earth operates but slowly; but that it still operates and must claim its own, he himself seems by this silent confession to be aware. So much by way of helping the adjustment of internal meaning to the attempts of psycho-physical explanation.

¹ Translated by Vaughan, in *Hours with the Mystics*, vol. i., p. 81.

It is of course clear that no rhythm of a wholly simple outline exists in this case. Hence those who look for the ground swell of the wave of mystic exaltation in some flux of that subtle quantum once called animal spirits, later, vital tone, and now coenesthesia, solve the problem too easily.¹ There are two plain reasons for regarding variations of this type as external to the matter in hand.

First, the irregularity of the experiences in question, the absence of anything like periodicity in their occurrence. Since mystical experience ordinarily presupposes an initial act of will, and often an extended moral preparation, our theory must at least show how the rhythm appealed to involves the history of the worshipper's conscience. The internal logic of the event is so far personal that its external shape must be that of a history rather than that of a process, the semblance of periodicity obscured or lost in the movement of the individual will. This means simply that if there is any psycho-physical circuit concerned it must be one in which the 'will' is interpolated as it is in the circuit of nutrition; it must be one which has as one segment a free connexion with the whole system of higher centres. And the analogy of the circuit of nutrition, which does indeed require an interposed voluntary undertaking, is still too restricted; for it is no matter of life and death to the individual that his mystical cravings, if he has them, should be satisfied regularly, or ever. In this respect the movement of mystical life would more resemble the irregular curve of the life of sex; and, still more, the movement of those love-like hungers, for beauty, for society, for solitude, and the like,

¹ Thus Godfernaux and Murisier, both writing in 1902, propose that the changes of organic sensation, coenesthesia, variable in all persons, become in the mystic a more pronounced oscillation. Godfernaux regards this as the explanation of all religious feeling: "Cette oscillation constante du ton vital est bien, semble-t-il, l'aspect physiologique propre du sentiment religieux". The mystic experience he regards as simply an overflow of ordinary religious sentiment: "quiconque éprouve le sentiment religieux est un extatique à quelque degré" (*Revue Philosophique*, vol. 53 (1902, i.), pp. 162, 164. Murisier writing under the title, "Les maladies du sentiment religieux," after pointing likewise to the "instability of organic sensation," adds the explanation that the marked phenomena of mysticism may be occasioned by the energetic pursuit of a moral ideal on the part of persons weak in objective attachment, in observation and generalisation. We are not much advanced by these suggestions. Maine de Biran, referring to his own experiences of mystical type, had already proposed in substance the same theory, appealing to "organic instability, the rhythm of the affective life, the alternatives of excitement and depression". No one doubts the influence of these variations, but it has become clear to us that such accounts touch only the accidents of the mystic's career.

toward all of which, although some over-individual life may be vitally concerned, the individual may hold himself quite free.

Second, there is no depression so far as 'vital tone' is concerned which corresponds in constancy and prominence to the elevation. The elevation is not in this sense above-normal that it must be compensated by a corresponding below-normal. On the contrary the elevation presents certain claims to be, as it were, another normal; some of its elements, for instance, tend to become permanent characters of consciousness, which could not be the case if they were simply extremes or 'hyper-tensions'. This is the point well made by Delacroix, when in commenting on the theory of Maine de Biran he says: "*À la rigueur*, the alternative of excitement and depression may be able to explain, and does explain in part, those conditions of enfeeblement, sadness, horror of self, which generally succeed the period of ecstasy among the mystics; it may explain also those passing 'aridities' which trouble the expansive beginnings of the mystic's life, aridities which the mystics signalise but which are lost in the expansion they for the moment interrupt. But it must never be forgotten that in the group of mystics here studied (Teresa, Guyon, Suso, and others) the last period of their career, wholly expansive, one of exaltation and activity, seems final. The systematisation of mysticism is more complicated than this elementary rhythm."¹

This consideration seems to Delacroix to relegate not only the theory before us, but also the phenomena of marked alternation in the early life of the mystic, to a position of unimportance. This alternation is in his eyes something to be overcome, and the process of overcoming it throws the career of the mystic into a rhythm of wider scope, a secular rhythm as it were, which takes the form of a threefold division of the mystic's life-journey. This threefold movement may be sketched as follows:—

First, when the way to God has actually been found, there is a period of facility and success, in which the God sought is found with relative ease, the divine 'favours' are abundant. This is a period of comparative uselessness to the outer world, of absorption in the interests and excitements of the new level of life, of experiment and progress, of penetrating through the vestibule into the very interior of the temple. This period covers all the four stages recounted by Teresa in her *Life* (not in her later writings), which to Delacroix

¹ *Étude d'histoire et de psychologie du mysticisme* (Paris, 1908), p. 415.

are simply arbitrary divisions in one progressive process of 'divine hypnosis': it is the period of 'expansion' above referred to. The second period is prepared by the defects of the first. For into the mystic's motive in this first period there enters, almost inevitably, some self-indulgence, a tendency to exploit the divine goodness, to seek spiritual gratification as a personal luxury, and to take pride in the signs of special divine favour. Whatever these tendencies, they are burned away in the second period, which is a time of 'aridity' in which the same apparent dutifulness and devotion bring no reward or token of approval. Many of the major mystics describe such a time of infinite misery, within which ecstatic seizures may indeed occur, but then they are ecstasies of torture. These are paradoxical states, thinks Delacroix, in which God is given as absent, *i.e.*, God addresses the soul but makes it conscious of the obstacles to union, so that often the soul desires death as a means of completing the flight held in agonised suspense. In brief the time has come in which the mystic must either retreat from his undertaking or overcome the fault in his own understanding of its nature. That error, as Delacroix conceives it, is in substance the false relation of sunderedness, accepted and even fostered by the mystic in his first enthusiasm, between the state of elevation and the level of ordinary experience. Hence the third stage abolishes that alternation: and in the 'spiritual marriage' there is a continuous possession of the ordinary life by the consciousness of God without fitfulness, or extraordinary seizures or the hampering of functions. It is a period of serene and powerful activity: the subject so far from being rendered useless by his mysticism is planted in the midst of affairs with immensely enhanced energy and effectiveness, as the lives of the persons studied bear witness. For Delacroix, then, the mystical experience has the character of a dialectical process, with thesis, antithesis, and synthesis, in whose last term a condition still typically mystical is free from those heights and depths, those interruptions and disturbances, which mark the earlier stages of the experience.

The work of Delacroix is in the highest degree masterly, and admirable in its union of sympathetic understanding with critical rigour. To my mind, however, he has mistaken the nature of the minor rhythm, and is thus in some danger of eliminating what is characteristic of mysticism. I should agree with Delacroix that the pathological fluctuations often associated with mystical experience are not essential parts of it; but I should not agree that the elementary alternation is essentially pathological, or that it is

ever overcome. For whatever the psychological phenomena associated with mystical experience may be, the thread upon which they are hung is—as I must insist—the mystic's intention; and if that intention is at all fairly conceived as an intention to worship, it involves an occupation of attention which in the nature of the case must alternate with attention to other affairs. I am driven therefore, in the search for a psychology of mysticism, to look for further analogies among those normal alternations such as sleeping and waking, work and recreation, competition and co-operation, the hungers and satisfactions already referred to, conception and gestation, etc. In this respect, De Montmorand seems to me nearer the truth than any other writer. He points out¹ that there are alternations in experience whose members are not simply antithetical and successive, but normally and even causally related to one another, as repose grows out of action, and action out of repose; and suggests that this may be true of mysticism also. The fact upon which Delacroix' argument is based, that much of the early elevation is built upon the later level of continuous living, may be interpreted, for instance, as analogous in no very far-fetched manner to the assimilation of a meal. The experience seems in fact to have supplied the subject with a certain moral fuel. His inability to bring its content to immediate expression is to be understood in part by the fact that this supply is still relatively external to him, and requires a certain time to be made his own. And that something like assimilation has taken place may be seen in the fact that the mystic is actually slowly made over by his experiences, and that many an one by dint of perseverance succeeds in formulating the meaning of his acquired insight and in communicating it. Rhythm of this type would then last at any rate as long as the subject continues to grow. Even approximate continuity is a sign of old age in mysticism, just as the gradual obliteration of the sharp rhythm of sleep

¹ In *Revue Philosophique*, vol. lvii. (1904, i.), pp. 261-262, in the course of an article on "Asceticisme et Mysticisme". His words deserve quotation. In reply to those who accuse the mystic of anti-social tendencies: "C'est qu'ils n'ont pas approfondi la notion d'alternance et n'en ont pas dégagé tout le contenu. Elle implique, en même temps qu'une opposition, un rapport de cause à effet. Le sommeil alterne avec la veille, l'hiver avec l'été, l'action avec le repos. Entendons par là que le sommeil prépare la veille, que l'été sort de l'hiver,—que l'action naît du repos et ne le suit pas seulement. La légende et l'histoire nous montrent tous leurs grands hommes se recueillant dans la solitude et le silence avant d'entrer en lice. . . . Nous avons tous notre grotte de Manrèse, ou nous nous retirons à de certaines heures."

and waking is a sign of physiological old age. Alternation lies deep in the nature of things psychical as well as physiological: it is the fundamental method of growth, of the influx of new freedom; and I am inclined to regard the mystical experience as an incident in the attainment of a new psychical level, and one which in various forms and degrees is a manifoldly recurrent event in every person's life. So much for general orientation as to the nature of the rhythm in mystical experience: I believe that it will now be possible by a nearer view of the facts to state with some degree of accuracy the *principle of alternation* here involved.

III.

A radical alternation in consciousness may involve the disconnexion of the two alternate strands one from another, as in the case of sleeping and waking. In the traditional type of ecstasy, the mystic is as thoroughly detached from his waking world as is the sleeper? and there are certain features of this disconnexion which I beg leave to recall, in the hope of catching a glimpse in this pronounced form of the principle of alternation which pervades all mysticism.

In this detachment of the ecstatic from his world there is an interesting union of voluntary and involuntary factors, which closely resembles the case of sleep. It is a part of the mystic's voluntary preparation to evade the insistence of the senses, to withdraw his thoughts and desires from the interests of current living, to enter into solitude and silence, to turn his attention within. In a measure this turning away is usually guided by a positive direction of the mind to some object,—say the passion of Christ,—and is sustained by a lively religious impulse which rather engulfs the other desires than destroys them: to this extent it more resembles the intense and pointed absorption of the abstracted thinker than the willing laxity of the wooer of sleep. But while the rapt thinker may be lost to his surroundings, his 'absence of mind' remains within control, he does not drift beyond the point of recoverable self-direction: the object of the mystic's meditation however becomes a living current which carries him away beyond the reach of life,—he is given over, like the sleeper, to the movement of forces which must run their own course. The period of absence from life is like a temporary loss of life, an obliteration of some elements of complete personality; and as the loss of life in sleep is regarded as a means of keeping it, so the mystic often looks upon his self-abandonment as a paradoxical condition, not

more remarkable than sleep, for maintaining his spiritual integrity.

It may be worth while to remark in passing that the idea of mystery connected with what we call mysticism is largely due to this disconnexion rather than to any inherent mysteriousness in the content of the experience. In the historical origins of the word 'mystic,' the thing signified was a certain *social* disconnexion,—the initiate unable to communicate his knowledge to the world, the world unable to make connexions with the initiate. But the underlying fact is psychological: mystery is felt whenever there are two bodies of experience not in perfect communication, quite apart from the question whether the one or the other is inherently wonderful or weird. Mystery does not lie in either of those two bodies alone; it expresses the state of mind of one who *begins to see*, that is, who begins to see one experience in terms of another. It is thus the characteristic quality of any new idea, not wholly naturalised in the mind. The mystic is presented with two experiences neither of which he can doubt; both must be true, and he does not understand *how* both are true. Here for instance is a typical mystical revelation of a mild order, and a typical expression thereof: "How came this creation so magically woven that nothing can do me mischief but myself. . . . If I will stand upright the creation cannot bend me." Here stands Emerson with the weight of appearances against him, sure of creation and sure of his idea, yet confessing that the mode of weaving the two into one fabric is beyond his penetration, and so, 'magical'. From this point of view, the mystic might be defined as the man who is willing to drop one world of assurance while he seizes another, confident that the fabric of the world will harmonise them both. Inability to bring the two experiences together tends, it is true, to cast doubt for a time on the reality of the one and the other; and the religious mystic is one for whom another world has gained such substantiality that the reality of everyday experience has suffered this kind of passing doubt. But even when the doubt passes he remains a mystic so long as the union of one with the other is not perfectly solved.

Having in the last paragraph been using the word mystic in a somewhat loose and generalised fashion, I now return to the mystic in our special sense, the man whose particular dissociation is between the *whole* of the system of things temporal on one side, and on the other the heart of the eternal, which he hopes to make empirically present to his consciousness. This involves an emphatic separation from

his visible social world as well as from his physical world, > a phase of the matter that needs special mention, because we are not inclined in our time to rate highly any solitary aspect of religious thought or practice, and because there is much in modern times as in ancient times that looks like mass-mysticism. I refer of course to religious dances, dramas, festivals, revivals, in which the white-heat of social consciousness seems to become the generator and sustainer of mystical enthusiasms. But I submit that even in these somewhat tumultuous and disorderly variations of our theme, the mass-consciousness forms the level from which the individual departs: he is not a mystic until his own spirit has made its solitary leap to God, like a tongue of flame out of the midst of the fire. Much of what we call 'social' life moves on a similar principle, that of passing from hand to hand a function which, in any one hand, is a solitary function: each one in turn becomes 'it,' i.e., takes upon himself alone the difficulty in question, learning by his own experience what otherwise he sees only from outside. Whoever helps to sustain any 'social' structure is alone just in so far as he is responsible; and he comes for the most part to his solitary social position through having wrestled with some angel or other in more literal isolation from other human ken. The initiate must go down alone into the grave, though initiation, on the whole, is a social ceremony. And so whether we have in mind an orgy of Dionysus or a meeting of the Society of Friends, it is individual seizure by the spirit which marks the moment of religious success. We do not understand solitude until we see that it can ride on the back of any whirl of sociality however furious: and that its pang may be the more poignant because the utmost limit of common possession has been tested in an immediately preceding moment. He who merely imitates is but a false mystic, for the thing to be imitated is the burst of original impulse; he who is entranced by social suggestion is but a false mystic, for the inner core of all that his environment presses upon him is the violent subdual of the social bond by the superior energy of the divine *rapport*. He alone is utterly unsocial who refuses, when his own watch comes, to go out and meet the absolute in the darkness. Solitude, I say, is the essence of mysticism; and I add the basis of its supreme social importance.

For it is the most dangerous things that are the most important. We of this age have come to fear solitude and with it mysticism, because solitude is the home of stagnant growths and morbid-consciousness, because it is the crown-

ing curse of all vices. We see in it only the danger of losing objectivity, which is indeed its essential peril. But it is the intention, and so the defining character, of the mystic solitude, that its absolute object develops in strength *pari passu* with the entrance into subjectivity. Mysticism, in its true character, is just the redemption of solitude: it is a process which enters one step farther into the heart of our own infinite subjectivity and reclaims it for social service in the form first of a deepened morality and art. If our own age with its growing sociality and immersion in the manifold is little mystical, it is because the power of evaluating solitude, and with it the depth of self-consciousness, is so little developed. And in so far as it has flattened and shallowed out, it is because it has so far lost its mystical instincts. Mysticism, as an identifying of the subjective with the absolute-universal, might be described as an organic cultivation of reason,—though not of the “reason which can (as yet) be reasoned”: its fruit is an insight without reasons (without palpable roots in other insights), and without friends. The vital function of mysticism is *origination*, the creation of novelty. Of the two enemies to this pure originality the friends are perhaps more seductive than the reasons. Inevitably then, the blade of the mystic’s disconnexion must pass through the whole sheaf of his social ties.

Can we now state the *principle of alternation* in any definite form? Most generally put, it seems to me this: Concrete living is a condition in which we pursue some total good under shapes and by means which are inadequate to it, and so partly false to it. We are from time to time obliged to reject what we have done, to withdraw our forward moving efforts, and revert to the Whole. This necessity is due not simply to the fact of error,—which might conceivably be remedied on the spot by some moving compensation,—but to the type of error: it involves not only our tools, but our empirical selves, the operators. Take the case of intellectual originality. One wishes to know the whole truth,—some unknown truth. The best means to that end are,—reason, and social reason; he who would originate must fill himself as full as possible of science, history, social motives, the whole world: but there comes a moment when these very things, his necessary means, become, as we said, his enemies,—his poisons. This is the moment at which they become *himself*. It is this self which must be withdrawn and reoriented; it must turn its back upon itself, and lose itself in the unknown whole. Every detail of psychical

operation shows this method of action. Attention is a rapidly alternating current, perpetually withdrawn from its object and instantaneously replaced: but in the instant of withdrawal, having recovered a better poise and a steadier termination, having wiped away the film of relativity with which self and object had begun to infect each other. The mystic only does consciously and totally that which we are all continually doing in the minuter movement of psychical life, that which we all resort to in fragmentary and instinctive manner.

Thus, at the bottom of the psychological alternation there lies an epistemological principle, which deserves to be called the Principle of Alternation. It is the counterpart and corrective of the Principle of Relativity. It is not knowledge that is relative, but the act of knowing. It is my concrete historical nature which determines that at any moment I may see but one side of the shield; it is my knowledge of the whole which leads me, by an alternation of position, to repair the defect of my knowing. In all science we recognise the alternate use of categories which are singly imperfect, but mutually corrective. The concept of substance, whether in the form of atom, or of energy, or of soul, may be inadequate for knowledge, but is indispensable for knowing. It is the same with social knowledge. Do I wish to know a person? I must pursue acquaintance in two antithetical directions: I must learn to know him in what he does, at his periphery, in the various expressions of his life that manifest themselves in my temporal world,—and I must also learn to know him by the pursuit of his central ‘substance,’ by the mystical seizure in intimacy of that unity from which all these plural deeds are deposited. It is by a similar interplay of categories that I must reach a concrete knowledge of my world as a whole: at its periphery, it is ‘experience,’ ‘life,’—at its centre it is ‘substance,’ ‘reality,’ ‘God’. My total picture of this world is drawn like an artist’s sketch: not by a line continuous in the field of vision, but by a series of lines which err and which are broken in their course by reversion to the—undrawn—idea. The plural and visible aspect of things is divine also,—that is, if we are able to see it so. But we need at least to have caught the idea of the original in some experience, in order to flourish with our interpretation. He who knows God at his periphery alone, or through morality and ‘social service,’ is using but one of a necessary pair of categories. He has what we might call an honourable business acquaintance with his universe. But he has no home.

IV.

In what has already been said about the mystical experience simply as a psychological event, we have been foreshadowing a definition of the mystic's purpose. It only remains to bring this into tangible form. The mystic who knows himself is a mystic, not because he finds his world so bad that he must effect a spiritual retreat from it; but because he finds his world so good that he must perform a spiritual journey to the heart of it. He is not content, nor able, to hammer away at the circumference without sometime catching a glimpse of the moving principle of his labour: and whether or not he can yet grasp that principle in philosophic expression, he can at least grasp it in an experience which is immediate without being irrational. Philosopher or not, he finds that his Reality must be known by alternate exposure to its peripheral and its central aspects, to its moving and its eternal categories; and he finds that in his knowledge of this central Substance, there must be included the empirical element, present also at the periphery. The impulse of worship may thus be understood as an impulse toward *integrity* in one's relation to his absolute: no matter in how many other ways he may know the real and the good, the worshipper desires to complete his relation by knowing them also in immediate individual presence.

On its subjective side, this impulse toward integrity has a twofold character. The mystic is moved by ambition and by love. His ambition is, to perfect himself, to clear his head and to purify his character. This ambition though it impels to the movement of mind we call worship is still touched by a sense of the importance of work, the world's work, as if it were for the sake of those ends that one turned his back upon them, because he must first unify himself. But when the absolute which one approaches is able to drain into its own vortex all the meanings of that work, and so to abolish the independent worth of that work, the zealot becomes the lover. When fear and hope have thus disappeared from the impulse of worship we have mysticism in its purity. It can hardly be better presented than in a simple note in the diary of Tolstoi, whose mystical traits (though he would hardly be called a mystic) are closely allied with his powers of penetrating psychological description:—

"Yesterday," he writes,¹ "I hardly slept all night. Having posted up my diary, I prayed to God. It is impossible to convey the sweetness of the feeling I experienced during

¹ *Life of Tolstoy*, by Aylmer Maude, vol. i., pp. 63-64.

my prayer. I said the prayers I usually repeat by heart, 'Our Father,' 'To the Virgin,' etc., and still remained in prayer. If one defines prayer as a petition or as a thanksgiving, then I did not pray. I desired something supreme and good; but what, I cannot express, though I was clearly conscious of what I wanted. I wished to merge into the Universal Being. I asked him to pardon my crimes; yet, no, I did not ask for that, for I felt that if He had given me this blissful moment, he had pardoned me. I asked, and at the same time felt I had nothing to ask, and that I cannot and do not know how to ask: I thanked Him but not with words or thought. I combined in one feeling both petition and gratitude. Fear quite vanished. I could not have separated any one emotion,—faith, hope, or love,—from the general feeling. No, this was what I experienced yesterday: it was love of God, lofty love, uniting in itself all that is good, excluding all that is bad."

The moving principle of Tolstoi's life at this time was doubtless ambition, taking impulsive shape as a desire to perfect himself and to "test himself," swinging perhaps only in this solitary instance within the circle of mystic worship. But this ambition and this love are closely related to each other. It seems to me true to say that beyond the limits of the mystic experience itself, the love of God *takes on the form of moral ambition*: that these two motives are, so to speak, allotropic forms of the same motive.

It is from this point of view that I would judge the theory of Leuba, who in several well-known articles¹ has done much to supply the lack of a psychology of the mystic's motive. He has rightly distinguished the two sides of this motive. The ambitious element appears to him as a fixed necessity for moral perfection, a "tendency to the universalisation of action," amounting almost to "hyperæsthesia of the moral sensibility," in many historic instances. The element of love appears to him under a very earthly guise, as a need for satisfying the instinctive affections, a need for "organic enjoyment" in which a thwarted human desire finds an ideal route to its satisfaction. The divine love, on this basis, is a form of the pursuit of pleasure; no wonder that it seems to him inconsistent with that other fundamental motive, the moral ambition so often expressed in the severe asceticism of the mystic's self-discipline; no wonder that the mystic's development is read by him as an elimination of Eros, a conquering of love by moral ambition, "a reconstruction of the

¹ *Revue Philosophique*, vol. 54 (1902, ii.), pp. 1 ff., 441 ff.; 57 (1904, i.), p. 70. *MIND*, N.S., vol. 14 (1905), pp. 15-27.

individual under the influence of the disposition toward universalised action, wherein he may reach entire deliverance from the desires of the natural man". I cannot but believe that this alleged incompatibility has been created by Leuba himself, through the view he takes of the nature of the divine love.

At the same time, Leuba is fundamentally right in recording the contrast between these two motives; incompatible they are not, but antithetical they assuredly are. And it is easy for the antithesis to become an antagonism. On the organic level, love and ambition look in opposite directions. The element of love may make its beginnings felt in the midst of work as a sense of the aimlessness of work, a questioning of worth-whileness, a feeling of *moral wear-and-tear* in the determined pursuit of things whose value is not wholly convincing, a need for recovering sincerity by spiritual repose: and this desire, still of the same moral stuff that first launched the work, now reverses the direction of action, and turns naturally to 'pleasure,' as a thing convincing without effort, especially to companionship and the friendship of the sexes. Practically, one turns away from work; and the motive which is at bottom a moral demand for the renewal of worth may easily be taken for a denial of worth: love, ignoring its own nature as transmuted ambition, enters into false competition with duty. And duty may respond by forgetting that it is nothing but transmuted love.

This is true in things total as in things partial: hence it entangles the mystic as well as other men. It is true that the love of God may become a path of dissipation, antagonising moral ambition: but it is not true that this is its natural character. We are bound to define the motive of mysticism by its normal condition, if it has one,—even though this normal condition had never yet been realised. And we are still more bound to give the mystics credit for their best achievements, and for their deepest discriminations. No one who reads the mystics can suppose that they have been unaware of precisely this danger; nor that they have been undiligent in guarding against it. They have seen and exactly stated the truth that the highest possibilities of experience are also the most perilous. Let me quote a passage from Tauler on this point:—

"There are those who have lost their way in the spiritual life, because they have undertaken to live this life after their own conceit, without the direction of God. They have indeed a desire to taste inward spiritual comfort, but this desire (not wholly freed from subjectivity) becomes in them

a veritable spiritual unchastity: for it is nothing other than a natural inclination or love which is bent and crooked inward into itself, seeking in reality its own comfortableness.

"Outwardly these two types of love, the natural and the divine, are as like as two hairs of the head; but in their inward meaning they are wholly alien. For the true lover of God offers himself up wholly, together with everything he has, and is capable of, and cannot tolerate the thought of any other appeasement of his longing than that ineffable Good, which is God himself. The others fix their minds upon the blessings and sweets which they demand from God, and if they fail to get them they are beside themselves with impatience and violent clamour. What they desire is a type of rest and comfort naturally pleasing to all creatures: and such an experience is possible to any person who only knows the art of emptying himself of imaginations and impulses. Let a man but separate himself from all contingencies and from all works, and there will come over him in this state of emptiness a piece which is very great, lovely, and agreeable, and which is in itself no sin since it is a part of our human nature. But when it is taken for a veritable possessing of God, or unity with God, then it is a sin; for it is in reality nothing but a state of thorough passivity and apathy untouched by the power from on high, which any man can attain without special grace of God. It is a purely negative state from which (if one in arrogance calls it divine) nothing follows but blindness, failure of understanding, and a disinclination to be governed by the rules of ordinary righteousness."¹

It has never been easy for human nature to sustain its love at the level of true worship; it has never been easy to keep integrity in presence of that seductive movement of reflexion which seizes upon an experience and forgets its first intention; there is a statistical certainty of lapse, and this, if Delacroix is right, necessitates the long agonies of the second stadium of the mystic's life-cycle. The important point for a fair scientific theory is: that mysticism has its own corrective within itself. It recurs to the essential identity of its love and its ambition.

To know that the love of God is of the same substance with moral ambition decides some questions about the psychological nature of that love. But it does not decide the worth of Leuba's thesis that it has close psychological kinship with the love of man and woman. It would be necessary

¹ Freely taken from Predigten, ii., pp. 235-239.

in a complete theory to show the wide differences of these two loves as well as their striking likenesses; but there is no greater scientific service than to define with accuracy the extent of this likeness so universally recognised in literature and history. To my mind this can only be done with the aid of the principle of alternation. Beyond doubt the mystic exaltation sweeps up into its current whatever in the thousand-fold alternate swingings of human nature moves in its own direction,—not, however, as their product but as their master. It would indeed be surprising if the sexual nature of man, with its movement away from the sphere of deeds to the sphere of substance, with its strong tide toward the over-individual and racial, with its suggestion of total, infinite, and yet immediate worth, did *not* more quickly and completely than any other human impulse discover in worship its ultimate meaning and law. And this, not because the love of God is at bottom sexual love, but because sexual love is potentially love of the divine. As to the details of Leuba's theory, I leave them to be dealt with by his competent critic, De Montmorand.¹ But the main criticism to be passed upon that theory is only that it is not the whole truth; and that in this case anything short of the whole truth is untrue.

The whole truth lies in this direction,—that *all* of our human impulses and loves, are akin. And the psychology of mysticism waits less for an analysis of the love of God than for an analysis of all other human desires. It is not this love, but those that need explanation. The love of God is the one natural instinct of man: worship is the one deed which answers as an echo all other deeds of history. Upon one point the psychologies of Plato, Augustine and Spinoza are agreed: that all special desires are refracted desires for the absolute good. We moderns with superior analysis have not yet regained in our own tongue these results. We need to know the 'laws of transformation and equivalence' of desires and values: then we should see how they may be one and all not suppressed by, but paid-over into, the all-consuming passion of religion. Both Leuba and his critic fall into the error of supposing that in the perfecting of mysticism some side of human nature is put under, some dissociation or amnesia has been accomplished, so that the 'lower centres' never again assert themselves. All this seems foreign to the facts. I like better the theory that in mysticism the needs of sex together with all needs are understood and

¹ *Revue Philosophique*, vol. 56 (1903), pp. 382 ff.; vol. 57 (1904), 242 ff.; vol. 58 (1904), pp. 602 ff.; vol. 60 (1905), pp. 1 ff.

satisfied; that all of the hundred voices of human desire are here brought to unison. With this understanding and not otherwise can I see how religion is to fulfil its assumed functions: To keep from mutual estrangement the primitive in us and the far-civilised. To offer individual souls—malformed in the specialisations of our social order, or mutilated in its accidents—the possibility of complete personality. To unify in wish and will, as reason does in principle, the whole moral existence of man.

Mysticism, as worship, is only a moment of reflux in the movement of living: but in that moment human nature is dissolved and recreated, shattered and remoulded—a little nearer to the heart's desire.

IV.—THE VEDANTIC ABSOLUTE.

BY HOMO LEONE.

The Self in all beings and all beings in the Self,—thus sees the Self-poised with equal vision in all (VI., 29).

By Me of Unmanifest Form this whole world is filled ; all beings are rooted in Me and not I in them (IX., 4).

I am the Atma, O Gudakesa, residing in all creatures ; I am the beginning, the middle and the end of all beings (X., 20).

Then in the Body of the God of Gods did Arjuna see the whole diversely divided world at-one (XI., 13).

Isvara, O Arjuna, is in the hearts of all creatures whirling by His power all beings as if mounted on a wheel (XVIII., 61).

So stand some of the significant verses of that book of books for the Hindus, the Bhagavadgita, the quintessence of the Upanishadic teaching. Here we find a statement of our doctrine, revealing to us the 'nature' of the ultimate Reality, if only we should try to intuit its spirit by transcending the intellectual tinge of the words of our common-day use. Our words having their function in a relational world are not the unambiguous media we require to 'describe' the Absolute. This is a primary precaution in all studies of the Absolute. Ill-use of words has been a cause of many of the misunderstandings in philosophical disputes and also of the odium with which philosophy is looked down on by many. Philosophers differ so much not because they *utterly* fail to catch at the nature of Reality as such, but because Reality *from our point of view* is so very variegated that on account of our predilections and the consequent nature of our questions, we get, as it were, different presentations of it according as we approach it. Each view is hence 'true' within its limits. For, with the attainment of Absolute Truth the problem itself disappears. Thus then, it is a fact that not only do we use words but many times words use us. Verbal quibbles are mistaken for philosophical disquisitions. *Fallacia secundum quid* and its converse seem to be commonplace in specially philosophical discussions. My object in laying so much stress here

on this apparently trivial matter is the simple but practically difficult one of attaining mutual understanding through words and sometimes even in spite of words. There has been a misunderstanding of the message of the Vedanta (lit. the ultimate knowledge) even in educated circles. We have in India 'professional' Vedantins whose life in many cases, strange to observe, is just anti-vedantic. True Vedanta does not make one sink to the level of the beast or the stone, but see one mighty unity in all nature and work more efficiently *in the world* for the very light it throws on the problems of life—a sort of spiral apex, to use a simile, where activity and inactivity, being and not-being, subject and object, in short all the dualities of this world of appearance culminate and 'lose' themselves in a higher unity. It is Vedanta alone that shows the possibility for a real concrete universal life. The appearance-life like two crossing lines ever diverging from the point of contact in opposite directions creating in us graded ideas of good and evil, truth and error, because of our occupying the position of that point, disappears in the light of the Vedantic doctrine into one point of unity where infinity and one are One. Verily the world *exists* by opposition or contradiction and when once we get 'behind' it by transcending it, we 'see' Reality 'as it is'; for, 'there' Knowledge, Knower and Known are One (to use 'intellectual' terms).

Generally stated, then, the doctrine of the Absolute is that though we see around us manifoldness of things, such manifoldness when considered seriously is one which cannot be but for some sort of relation based on opposition underlying it; and when we transcend it we have a unity which absorbs the relation into itself and thus the manifoldness along with it. Do we not in our ordinary thinking take, for example, Time, Space, Causation, etc., as so many reals? But can we seriously maintain that these are so many ultimates *in which* Nature is? Is it not rather true to say that *these are in Nature*, and hence hold good in the apparent multiplicity of Nature—from the standpoint of individual things? That is at least what we may mean by saying that these are appearances in things and that with reference to the Whole they have no existence. Thus it is, to take one case, that the past-present-and-future of our consciousness is Eternal Now in Reality (which phrase is nonsense if interpreted strictly by our ideas), and that the latter can no more be derived from the former than a cube from adding together any number of plane squares. The variety of the world, therefore, is due to 'oppositions' and 'contradictions' which are only 'appearances,' non-realities from the absolute point of view, but which appear as real for

the reason that we, as we generally consider ourselves to be, are involved in the opposition. The most fundamental of such oppositions is that between Self and not-self, each having existence on account of the other: and that is the cause of the existence of our human world and our human values which we are prone to regard as ultimates. A higher transcendent standpoint uniting all is possible and is, and it is not for us to deny it from the lower one which we almost universally occupy: for such a denial implies dragging the higher to our level, when, of course, it will be one *along* with the lower showing no reason for its existence. It is to be noted here that it is the same Absolute that we reach whether we proceed from the 'oppositions' of intellect, or of feeling, or of will, though when we come to a statement of it we cannot but use cognitive terms. The doctrine of the Absolute, therefore, says simply that our distinctions are not absolute, but only distinctions which exist because we are unaware of the Absolute, because we consider ourselves separate entities in the midst of separate entities. It is the 'false' opposition that we take to be real; and we thus seem to enjoy and suffer, act and be acted upon, know and be known. I am reminded here of a very suggestive Vedic statement which goes, "Whole is That, whole is this; from (That) Whole (this) whole is 'projected'; isolating (this) whole from (That) Whole, That Whole alone remains" (Intro. to Isa. Up.). 'That Whole' is the Absolute; 'this whole' is the world of appearance. 'This' is used in the Upanishads with reference to the world of separateness, of 'appearances,' and 'That' with reference to the Absolute. The spirit of the statement is that 'this' world when detached or isolated from That, and looked on as separate by itself is nothing, its true reality being in That Whole which is ever the same in Its absoluteness. The appearance-worlds are in That and not That in them: That as That can never 'appear'. How 'That' stands to 'this' is a question which cannot be admitted because it cannot be raised: for 'That' is not one *along* with 'this' to admit of a relation. Hence the Many are of 'this' and not of 'That'. "This" in its becoming explicit, appearing, is many and these many reflecting in themselves variously the potentialities or aspects of the whole look upon one another as so many 'others'—so far as we take conscious units like ourselves into consideration. We should remember, however, that neither 'this' nor the 'many in this' can be but for That. Thus the many are and yet are not. Evolution, becoming, time, space, individuality, etc., are of 'this' and are relatively 'real' to this: but to say that these are absolutely

real is suicidal. The 'this' as an apparent appearance-whole, has its ultimate root in That, and may for certain purposes be considered by itself as we shall see in due course when we take up the Vedantic thought on God and Nature. Such is the Vedantic solution of the problem of 'the One and the Many'. Unless we clearly note the 'nature' of the Absolute and of this appearance-world in That by the light of our own intuitive 'spirit,' we should be making an unconscious assertion to ourselves, due to force of habit, that That is somehow an 'other' to this, thus completely misunderstanding the whole doctrine and raising unanswerable because inadmissible questions. In this doctrine there is nothing to rob us of our individuality as some fancy; on the other hand our pseudo-individualities find their reality in the unitary Individuality of our world. If this should still dishearten some the fault is not of the doctrine, but of the element of 'Avidya' (Sanskrit for ignorance of Reality, for nescience) dominant in our incipient self-hood. The many in 'this whole' are in Reality the Absolute. But again, it is to be remarked that when we speak of 'whole,' 'all,' we should guard ourselves against another intellectual prejudice; we cannot help using these terms, for we have none else. The Whole is *not* a whole of parts, of all these merely added together.

It is the common aim of all philosophic thought that unity is to be somehow attained. Some rest satisfied with a relational unity; but nothing less than absolute unity satisfies the Vedantic demand. Should we care for less than that, philosophy seems uncalled for; we must be satisfied with mere "sciences". The relational unity is based on opposition and hence for philosophy or ultimate knowledge is untenable. This tendency towards the one unity is perhaps as old as reflecting man; for some kind of description or other of the Absolute is found in the philosophic and mystic (a victim to much injustice) literature of all peoples, ancient and modern. The descriptions vary no doubt, for *they* are appearances after all conditioned by our brain, and because, again, the Absolute *for us* is Infinite. As men we are to intuit the Absolute in all of them: for, as we shall see, ours is a peculiar position in Nature.

The Absolute, thus, is a term to signify the totality (for want of a better term) of the whole, known and unknown, existent and non-existent, and looked on as a unique secondless unity. It is a unity in the sense that every unity that we know of is only a 'reflexion' of Its transcendent and yet somehow (to us) immanent Unity. It is more than experience in the ordinary sense; for experience is a word

implying three indissolubly related elements—the experiencer, the experienced, and the experience; and It is all these in One. It is on account of That Whole ‘this whole’ is as a ‘reflexion’; and becoming explicit ‘this’ appears as many though in Reality it is the Absolute. A crude simile may be used here to understand what is meant by becoming explicit and hence many. When we *ex-press* a complex thought of ours which in its implicitness cannot be said either to exist or not to exist (from the point of view of words when expressed) except as one undifferentiated whole, we have long sentences, explicit statements with words related to one another in multifarious ways—differentiations in short; each word by itself is unreal in the strict sense, its individuality being only that of the whole. The Absolute may be said rightly, then, to be the beginning, the middle and the end of beings, as embracing the appearing and disappearing of many ‘this-es,’ as ‘Implicit-explicit-implicitness’ in One. It is not any one of the ‘many,’ nor all combined merely in a sum, but all as One. There are very nicely expressed conceptions of ‘That’ scattered throughout the Vedantic literature. My aim here is to give some impressions of mine from my own studies in the light of Occidental metaphysics, especially of the Absolute of Prof. Bradley.

It is not possible to know the drift of the Vedantic teaching, which was particularly concerned with practical life, without some acquaintance with what it has to say regarding man, Nature and God (in Sanskrit Purusha, Prakriti and Uttama-Purusha or Isvara).

Regarding God Vedanta says that He is the ‘first *ex-istent*’ (in a relative sense as we shall see) ‘from’ the Absolute, coming ‘out’ from That, as it were, from a state of ‘slumber’ in that, coming into actuality from a state of potentiality. He is the ‘this,’ a system or cosmos, a whole of consciousness-matter-and-energy, which is the evolving, changing world of space, time, etc., of our consciousness. He is the God or Ruler of popular theology. In His true nature, however, He is the Absolute. His is the consciousness that we ‘share’—the one consciousness of the universe that all beings reflect in diverse degrees. “Know Me further, O Bhârata, as the Field-Knower (one consciousness) in all fields (bodies or things); verily I say Knowledge of Field-Knower and Field is Knowledge real” (Bhagavadgita, XIII., 2). The sun with his system is the physical representative of our Isvara with His system. There are many such systems or universes, and hence many Isvaras in the Whole Universe, and these Isvaras are all so “many,” as it were, in the bosom of the

Absolute. The Devi Bhagavata clearly speaks of many such Isvaras with their systems. "Grains of sand are perhaps numerable, but of universes (there is) not any (numbering)" (IX., iii., 7). For our purposes we may consider Isvara in the abstract. He separated, as it were, by the thinnest 'film' of individuality from the Absolute has His non-ego in this separation which thus forms the 'matter' of His universe—the primary 'opposition' necessary for the existence of a universe. The universe may thus be considered as His body or even as Himself provided we do not misunderstand the position. By His power of Maya (Daivi Prakriti), the one divine energy of His, He multiplies Himself, "sacrifices" Himself for a universe, becomes more and more explicit. This process must be a limited one; for becoming manifest means well defined and hence limited. This process of becoming manifest or externalised is called Pravritti or forth-going; and correspondingly we have Nivritti or in-drawing. This completes the cycle of His universe; for Vedanta believes in cyclic evolution—slumber and wakefulness, to use certain graphic symbolic metaphors. The Absolute is the *Eternal Cause*, so to say, of these periodic appearances and disappearances of Isvaras with their systems, the formal cause of each succeeding system being, however, the preceding system. All our multiplicities and differences, therefore, are to be traced to the primary duality involved in the 'first' appearance of the Isvara and His potentialities.

But there is a difference here between Eastern and Western thought. Whereas in Western thought matter begins or ends with ether, the Eastern says that there are different varieties of 'matter' beginning with the first body of Isvara and ending with what we call physical matter (of which the Western ether is a species) which is but the limit to which the first primary limitation evolved (or involved); for matter, in the Vedantic conception, is nothing but limitation on consciousness for the very being of consciousness, imposed by the will of Isvara in His system. Corresponding therefore to these gradations of matter consciousness also manifests itself in different ranges. His more subtle form of matter is what is called spiritual, a word indifferently used both with reference to matter and the consciousness conditioned thereto. Thus evolution comes to be a gigantic scheme in a universe conducted by the power of Maya of an Isvara; and this triad—Isvara, Maya and Prakriti—appear as distinct so long as manifestation is, but disappear or are absorbed at the 'end' into That non-describable Unity. Maya as forth-going, creating illusory separatenesses, is called Avidya, or Asuri Maya,

and as in-drawing, destroying pseudo-individualities, is called Vidya, or Daivi Maya. It is thus the cause both of bondage and liberation for the Vedantin. Isvara conceived as the Absolute alone in reality is thus the radiator, sustainer and destroyer of His system. The Absolute is the one ever non-manifest basic existence or 'be-ness' (Sat in Sanskrit). The explicitness or manifestation of Isvara with all the variety and differentiations consequent thereon is what we may call nature, the "this" referred to. He is the nature and without him there can be nought in the world. For us therefore, He is the representative of the Absolute; and we should be doing injustice to Vedanta if we identify Him as Absolute with Him as appearance. Hence is the relevancy of the oft-quoted simile which though not quite accurate (for accurate similes there can be none, the Absolute alone being similar to Itself), is very graphic in describing the Absolute with the countless Isvaras in It: The Absolute is like the mighty ocean whose fringes form the waves ever going out and coming in, of Isvaras with their systems appearing from and disappearing into It.

So far no case has been made out for the Absolute, no proof has been attempted. My primary aim has been to describe the doctrine as I understand it. Regarding proof I am convinced there can be none. The Absolute just because it is the absolute cannot properly be said to be proved. We find that we have to postulate it by an *infelt* necessity if we want to 'understand' the universe as a 'whole,' as a unity. Attempts to prove it will be like (to take examples on a smaller scale) Mill's attempt to prove the law of causation or Hume's attempt to find out the Self.

Regarding man what has Vedanta to say? Vedanta believes that every successful philosophical inquiry must be based on a thorough understanding of man's position in Nature, and hence no school of philosophy can be more experiential than Vedanta. Man is conceived as a "reflexion" in miniature of Isvara with His Cosmos who again is only a reflexion or the 'highest' appearance, *as it were*, of the Absolute. Appearance *is* (appearance) only in the apparent manifoldness; in the Absolute it *is not*. Any particular thing of our experience is what it is because of the infinite relations in which it stands or opposed to 'others'; its true nature is where it takes into itself the 'others' when it ceases to be itself and becomes the Absolute. The becoming explicit, then, of Isvara culminates in man, the pravritti-process just begins its inverse course in him. Hence the ethical importance of man as one in the many. "Nivritti" begins with

him and hence the conflict between higher and lower, reason and sense, good and bad, and so on. Herein also we find the significance of religion in its true sense as an attempt to link him back to his Mother-source. It is in this sense that we have to understand every truly religious reformer. The various religions in their true spirit are so many attempts conditioned by the nature of the people to whom they were given, to bring all men into one divine solidarity. Their Teachers are men (shall we say divine men?) who have seen the 'other End' of Life, who have been fully surcharged with the 'essence' of Isvara. We are inevitably driven to seek for That by the inherent impulse in ourselves—by That. Perhaps the ultimate reason of all our petty endeavours too for 'this' or for 'that' is, unconsciously to ourselves, That alone which through 'avidya' we vainly seek 'here' and 'there'. Hence the equality of all religions for the Vedantin. We may state our position regarding man in a different way again. The Pravritti-path may be looked on as the period of sowing and the Nivritti-process as of reaping; that is, in man alone we find the reproduced aspects of the Cosmos as emerging to functional capacity. In the case of the sub-human kingdoms the 'sowing' is not complete. Nature is doing for them what man can do for himself; man is self-conscious and they are not. Hence the responsibility on man to lighten the work of Nature. Such is the theory of Evolution, evolution of life and consciousness and *hence* of form, implied in the Vedantic thought. Thus it is that we have the statements, 'Man know thyself,' 'Man is the microcosm,' 'Thou art That,' 'Ye are the temples of God,' 'Man is the measure of the universe' (with many apologies to Protagoreans), etc. Studying man is to study God and Nature; and hence the importance of a *real* psychology for philosophical purposes. As we evolve from mere 'manhood' our 'link' with Isvara or God gets more and more strengthened, until there ceases the petty distinction between 'me' and 'thee,' a distinction which seems so very ultimate to our half-opened eyes. This does not mean annihilation, but the gaining of the one real individuality in the universe, solving the *to us* perpetual problem of Freedom and Destiny. A rough simile again may be taken from our personal life in this context. Do we not see, because we are able to transcend it as men, how any particular psychosis or psychical process which is complete in itself, especially in animals, is integrated with and merged in what we call our self. It is not there merely as a part in a whole. The psychosis by itself is the 'Self' for the time being; but its reality is in its

absorption in the whole larger self or personality. Man is called in Sanskrit Purusha; but Isvara is Uttama or supreme Purusha. To make the position clearer we may express the place of man in Nature according to Vedanta in *quasi* mathematical terms thus:—

The momentary psychosis : our personality	
: : our personality	: our true ego
: : our true ego	: (our) Isvara
: : Isvara	:
. . . .	: the Absolute

This statement is of course from a purely human point of view.

There is another peculiarity in the Vedantic doctrine regarding man. He is not the mere person of a threescore and ten years of terrestrial life. The true man, the real man called Karana-atma puts forth periodic appearances on earth, incarnates cyclically—a reflexion 'lower' down again of what is true of Isvara 'above'—for reaping what was sown before, for ultimately gaining true Self-hood in the Cosmos. The Karana-atma stands *relatively*, thus, as the 'absolute' to the terrestrial man, integrating into itself the fruitage of his various experiences, this incarnation being effected by a sort of limitation on the true nature of the Self. The law guiding these occurrences is the law of Karma, of Causation, holding true of little things in a Cosmos as well as of Cosmic cyclic evolution. This law holds the person in bondage so long as he wants or desires this or that showing a lack of 'Viveka' or discrimination between Reality and appearance; for such desires imply his identifications with separatenesses in the manifoldness, and thus bring the man within the fold of the law which holds good of parts within the whole. If by the knowledge of Reality he sees himself as the Absolute in reality, then 'he' gets 'above' the law. Such a 'being' is what we know here as a Mukta (liberated self) or Nirvani (one whose consciousness has transcended the human). I have to dilate on this matter to this extent, because I wish that Vedanta should be understood not as a play of uncurbed imagination with results that are mischievous to human life, but one having a sublime practical object in view. Only he who lives a truly Vedantic life will be able to appreciate the 'mental' attitude which Vedanta teaches. There is no greater hell for the Vedantin than isolation; and what is isolation but a temporary identification with a 'this' or a 'that'? It is the knowledge of the oneness of the whole, working in one's life that enables one to save oneself from these compulsory isola-

tions of life, and 'links' one with the one divine life. Such is the general outline of the Vedantic teaching regarding man, Nature and God. It must however be noted again that the old books of the ancient Hindus are books written as practical instructions for purposes of meditation and of practical life. Thus we have bare statements of fact which it is the business of everybody to verify for himself by actual experience. It was not their object to discuss and force learned metaphysical disquisitions on unwilling ears. It is this reserve that still remains as a fossilised superstition in the reticence of 'learned' Brahmins to discuss with 'aliens' on these matters. Their statements are neither 'scientific' nor 'unscientific,' but remain non-scientific serving as hypotheses worthy of our investigation. But the one important feature conspicuous in their descriptions is the fact that 'experience' as they understood the term is of hundred-fold complexity to what *we now* regard it to be. The very fact of their constant mentioning of different 'planes' of matter and of consciousness is quite sufficient to convince us of their standpoint. They speak as if they had them as 'facts' and do not reason about them. The universe-process of an Isvara thus 'appears' from the Vedantic standpoint as a mighty process of attaining self-consciousness at once thorough and universal. That seems to be the spirit of the constant Upanishadic injunction "Know Thyself"; for Vedanta is the statement of the philosophic doctrine from the cognitive standpoint; Vedanta is a Darsana, an aspect of study.

A few quotations may be given here on some of the points referred to.

"One only, without a second" (Chh. Up., VI., ii., 1).

It is the unity, which never 'appears' (for, by appearance it is many), but which *ever is in its absoluteness*.

"That willed; may I be many, may I be born." That is Isvara willing to radiate a universe at the beginning of a world-cycle (Chh. Up., VI., ii., 3).

"This Self is Brahman" (Mandukya Up., I., 2).

"All this is verily Brahman" (Chh. Up., III., xiv., 1).

"To know oneself is to know the Self and knowing It all is known" (Chh. Up., VI., i., 6).

"Two 'forms' of Brahma, of form and of no form, perishing and imperishing, finite and infinite, existent and transcending existence" (Brh. Up., II., iii., 1).

"Earth, water, fire, air, ether, mind, buddhi (pure intuition) and ahankara (egoity), these eight are the differentiations of Prakriti. That which holds together the multi-world, other than the manifold Prakriti, the higher, of life-essence,

the Parā-prakṛiti, know thou that, O Arjuna. Know that this is the source of all beings; I am the origin as well as the end of all this world. Beyond Myself there is nought else that exists; 'this whole' is strung on Me like gems on a thread" (Bhagavadgita, VII, 4 to 7).

The Devi Bhagavata contains many statements regarding the two kinds of Prakṛiti, which will be of great interest to the scientist and philosopher of the modern type. But they are concealed in significant symbology, a kind of picture language which the ancients used for purposes of secrecy.

The thirteenth chapter of the Bhagavadgita is full of descriptions of the Conditioned (Isvara) and the Unconditioned (Absolute) Brahman, true knowledge, etc. Below are given a few verses regarding the former.

"I will tell you of That which ought to be 'known,' the beginningless, transcendent Brahma which cannot be declared to be either existent or non-existent and knowing which one attains to Its Eternality. Everywhere It stands enveloping all in the world, with hands and feet everywhere, everywhere with eyes, heads and mouths, and what is heard everywhere. Shining with all the virtues of the senses, (but) without any of the senses, supporting all, (but) independent of any, enjoying all attributes, (but) without any attributes (It is). (The Absolute percipient, perceived and perception in One.) Within and without all creatures, motion and non-motion, unknown in Its entirety because of Its subtleness. It (is) far away and (yet) near us. (The Absolute as both transcendent and immanent.) Unbroken in all creatures, yet enshrined in each as if broken, It is to be known as the all-sustainer, all-producer and all-consumer too. Light of lights and the 'beyond' of darkness, knowledge, object of knowledge and the fruit thereof, seated in the heart of all (It is)."

These are indeed very significant verses when properly understood; and the results of some of our modern metaphysicians are to the same effect. These verses need no further comment; touching them would perhaps taint their purity if it is not already done in translation. Sri Sankara,¹ the founder (not the originator) of Advaita (monistic) school of thought, may be taken as a type of the absolutist philosophers of India. Leaving out of account at present what he has to

¹ There is no historic evidence as to when he lived and whether his alleged works were his own or by some one of his order assuming the same name by custom. The works do not exhibit spotless scrupulosity in interpreting the Sūtras. Still generally they may be considered as representing that particular school of thought to which he belonged.

say by way of commentaries on the Brahma-sutras and the Upanishads, I shall briefly refer to three or four verses of his "Dakshinamurti Stotra," a poem paying reverence to the ideal teacher who teaches his pupils this nectar of absolute wisdom. In the opening verse the keynote of the doctrine is struck by showing that this world is an appearance whose reality lies in something transcending it. In a sense this appearance-world is like unto a dream whose reality must be sought in a trans-dream condition—not in its explicit manifest condition but in its implicit non-manifestness. During the time of real awakening—awakening into the realm of Reality—the absolute oneness is known, but known as one with the knower. That is the reason of speaking of Reality in Vedantic literature as Atman, the Self, the Knower. For 'there,' one as the Knower is at-one with the known. The Brahma Upanishad says, "How can one who 'sees' the Self alone everywhere, see any 'other'?" (VI., v., 15). In the second verse he says, that in its 'beginning' this world is One Undifferentiatedness. But by the power of Maya it is seen as *ex*-isting in space and time. Next he says that the becoming explicit originates the non-real appearance-world which thus seems to 'oppose' That, claiming reality. That is how we have in Sanskrit the word "Sat" (to be translated as absolute be-ness) with reference to 'That' and 'a-sat' (*absolute* non-existence or non-ness) to 'this'. The claim of 'this' to Reality as such is thus an illusion—the much-talked-of Maya. The Taittereya Upanishad says, "At its root ("in the beginning") 'this' is not (a-sat) only" (II., 7). Such in general is the trend of his poem. There is a fine verse in the Gita which I am tempted to quote here: "What is night for all creatures (the manifold) is 'waking' (absolute Reality) for the self-controlled (seer); and what is 'waking' (the appearance-world) for the creatures that is night (unreality) for the 'seeing' sage" (II., 69). Such is the absolute Monism, to use a modern word for an old thought, of the Vedantic doctrine.

We must in passing note the doctrine of Maya, the much-abused and well-nigh misunderstood cardinal teaching of Vedanta. Stated plainly it means that the appearances of Isvara are only delusion if we take them seriously, as they merely appear—as distinct sharply defined realities. We, living in this world of realities—oppositions and contradictions—cannot properly state in *our* terms the nature of the ultimate reality. Says Taittereya Upanishad: "From which speech along with mind return without approaching, knowing That as the Bliss of Brahman, one need entertain no fear from anything" (II., 9). If we should forcibly try to shut

reality in our terms, it will be only a fancy of ours. But through words we can use our 'intuition' to apprehend to some extent what it might be. Thus we cannot raise a question Why Reality manifests itself; for this implies an 'opposition' which Reality does not allow. There is the assumption in the question and hence in the answer that manifestation must be explained in terms of our motivation which is possible on account of an 'other'. This cannot be in the case of the 'self-contained' Absolute. Hence it is an unanswerable question. Stated otherwise—how manifestations come to be—the question can be admitted, the answer is forthcoming; for, as already stated, Karma, causation, is the principle governing the occurrences of cyclic manifestations. Maya thus becomes the *power* (of Isvara) behind the universe, and not as popularly understood a synonym of pure unconditional illusion. The apparent separations in 'this' and yet their Absolute dependence on 'That' both "in" and 'above' them, where they cease to be themselves as they are to us, are all effected by Maya. It is not therefore as appearances that they are 'there'—a contradiction there too if so,—but as the non-separative Absolute Itself. The Maya is in the claim of 'things' as ultimate reals by themselves; and hence the identification of Maya in this sense with Prakriti or matter, the basis of division and multiplicity. This Maya (in the general sense) as the power of Isvara in bringing a system into *existence*, appears to us both as the centrifugal force in the becoming of the one into many, and as the centripetal force in the 're-becoming' of the many into one. Maya thus conquering itself is symbolically represented as the serpent swallowing its own tail. For ethical purposes however, unqualified Maya stands for the separative element—*avidya* or ignorance; but as *Vidya* it is the same as *Daivi* Maya, leading one to fuller realisation of the unity of the world. The greater the idea of separateness, the greater is the delusion (Maya); the greater the idea of unity, the less it is. An upanishadic teaching goes, "Having 'crossed' death by Avidya, one attains immortality by Vidya". Thus avidya or intellectual relational knowledge, when perfected, transcends itself, and leads to Vidya or ultra-relational intuition into Absolute unity. Thus though Maya is unitary and continuous, still on account of our position, it appears as running in two opposite directions—another 'Maya' again. It is in this light that Vedanta understands the doctrine of 'degrees of reality'. This doctrine of Maya is misunderstood and misapplied, because people through confusion and unreflectiveness think that appearances as appearances—from the standpoint

of appearances—are not. It is on account of such ignorance that many so-called Vedantins commit themselves to a most paradoxical and irresponsible life. It is impossible for a true Vedantin to do anything immoral, because it is a psychological impossibility. An evil act betrays the existence of an unuprooted idea of separateness—conscious or subconscious—which is delusion. A true Vedantin is one who has conquered 'Maya'. Thus it is that 'virtue is knowledge'. Without a knowledge of the Absolute we cannot say logically that we live in an unreal world. The doctrine of Maya in saying that the 'world' is unreal is therefore quite consistent; for the world is only by difference and manifoldness, and these latter are not so in reality. That is the reason why Sankara says in One of the references, that the Absolute is the pure Sat, and this world of appearance is A-sat. This A-sat is thus due to Maya.

We cannot enter here, nor do I feel competent to do so, into the details of this doctrine of Maya with all the account of the 'mechanism' of the universe. They can be found, of course, in veiled symbolic language in the Purânas, especially in the Devi Bhagavata and in the Lalita Sahasranamani. There is a purpose in the veil, for a true knowledge of Maya is a knowledge of the power of powers, and by ignorance one can bring destruction on oneself and danger to humanity.

It may be noted here that two terms—Mûla-Prakriti and Avyakta—are of frequent occurrence in Vedantic literature and require a word of explanation. Mûla-prakriti or root-matter stands for the first-veil of matter undifferentiated yet into the various grades of existence, by which the Isvara of a system becomes self-conscious on his first emergence 'from' the Absolute. By the further energisations of Isvara, this root-matter 'evolves,' differentiates itself into the various beings of a system. Mûla-prakriti is sometimes also called Avyakta (undefined). Avyakta is a term indifferently used both with reference to the non-manifest Brahman or Absolute, as well as the undefined matter. And since there is a partial similarity in these two cases there is a justification in the use of the same term for both, though the distinction between avyakta as undefined matter and Avyakta as the Absolute non-manifest 'Sat' should not be forgotten. "At dawn (of cosmic day) the definite all arise from the indefinite (matter); but at Eve they disappear again into the same undefined. This same swarm of creatures evolving from shape to shape dissolves again by law at nightfall and appears at dawn of day. A yet higher 'nature' than (this) avyakta there abides, absolute and eternal (transcending

existence and non-existence) which when all creatures disappear, alone is never not. That is called the non-manifest (*Avyakta*), the Imperishable; That is said to be the supreme Goal; reaching Which none returns. That is My highest Abode" (*Bhagavadgita*, VIII., 18 to 21). Again matter as differentiated (*Prakriti*) is described as possessing three attributes, *Sattwa*, *Rajas* and *Tamas* (translated as rhythm, activity and inertia). To understand what this means, we may remember what we have already described matter to be. These three attributes then express in their different and various combinations the different and various kinds of limitations which consciousness and life must have in order that they may be. Hence these attributes make up what we call matter. "This whole world is deluded because of this triune-ness of qualities in things, and hence knows not Me, the unchanging transcendent." "There is not either on earth or in heaven amidst gods, a creature free from these three qualities, from nature born" (*Gita*, VII., 13; XVIII., 40). It is curious to observe that these qualities answer to some extent to the three laws of motion according to Newton, and that matter is being explained by Modern Science in terms of motion.

It remains to be seen, in conclusion, what the bearing of the Vedantic doctrine is on some of our practical problems.

Taking sciences first: Sciences from the Vedantic point of view, are the various kinds of endeavours to go from the explicit manifoldness to the implicit unitariness of our world. In the case of physical sciences studied purely as sciences—though we are now having more and more philosophical sciences—our conclusions are pointing out to an undifferentiated 'basis' of matter: beyond that physical sciences have not yet gone. Thus we are left with a lifeless carcase of ether (or whatever it may be) which does not further respond to our questions. The reason seems to be that we have started with only one-sided questions, and hence 'nature' as presented by sciences is partial. Further 'matter' is to be understood not by itself, but in the light of consciousness and life for which it is. This aspect is what is ignored by physical sciences. And even what we call biological sciences commit themselves to explanations from the physical point of view. Unless this prejudice be remedied, it would not be possible for modern physical sciences to make further advances into the nature of reality. For matter, from the Vedantic point of view, is called *Tan-mâtra* (lit. measure of That) and is self-explaining. A true science is one which studies matter and consciousness, form and life,

from the point of view of the latter: then shall we have philosophies of the different aspects of this variegated world, and not merely (and sometimes self-contradicting) sciences. Vedanta then has no quarrel with sciences if they perceive their own self-limitations. Regarding psychological sciences, the same defect seems to infect them; it is so because they are modelled consciously or unconsciously after physical sciences. These also require thorough overhauling to satisfy the Vedantic demand: for, at least for the Vedantin, there is a confusion in modern psychology between mind and consciousness.

The Vedantin is perfectly tolerant with all our various endeavours; he has no quarrel with anybody. He believes in the verse of the Gita: "As is the way by which people try to reach Me, even so do I receive them; men in all their endeavours are following My path alone, O Partha" (IV., 11). It is only by failures, by evil, that we become wise and there can be nothing wrong of a universe which is the wisdom of Isvara Himself; and a man is considered wise in proportion to his conscious co-operation with Isvara for the very privilege which he has in sharing His nature. The scientific aspect of Vedanta is what is called Raja-Yoga—kingly science; and it is a peculiar training which one undergoes to study things not from their mere external appearances but from the point of view of one's consciousness which one tries to develop and enlarge from within. A true Raja-Yogi is one who knows both form and life from a study of one's life-side 'within'. The Western scientist may laugh at this; but the Raja-Yogi is not disturbed, for he is centred in the bed-rock of knowledge itself and he *knows* that. For further remarks on Ethics and life, from the Vedantic point of view, I have no space here; we may take another occasion to study them.

We may close our study with the consideration whether Vedanta is pessimistic, atheistic, sceptic or fatalistic. To answer these charges, I must first confess that I do not understand clearly what these terms mean; I am of opinion that herein we enter a field of individual predilections and hence there can be no argumentation. If we get answers either affirmative or negative to these questions such answers are not entirely due to the nature of Vedanta as such, but take in a good deal of the questioner's mental constitution. For how can the same subject take at the same time two contradictory predicates? If Vedanta be an utopian scheme, then perhaps we may put these questions to it as if it were a piece of art. But I believe Vedanta is serious and hence cannot entertain these questions. If Vedanta is truly descrip-

tive of the nature of Reality as the "originators" believed because of the first-hand knowledge of their own into infinitely wider ranges of the Cosmos, then it is we that are to modify our psychological attitudes towards it. Nor can we put the question whether Vedanta is 'useful' to us for the very same reason. We should not involve ourselves in paradoxes, for a paradox is a consequence of impossible or inadmissible questions.

Thus far I have described the general nature of the Vedantic doctrine as I have understood it. I have no claim to originality; for there can be 'nothing new under the sun'. Since I feel that its teachings are elevating and make possible the only life that is worth living at once human and divine, concrete and universal, I believe it might be so to many more that may know it; for Vedanta is a message of universal peace as the final words of every upanishad stand,

"Peace to all".

V.—THE LIMITS OF DEDUCTIVE REASONING.

BY H. S. SHELTON.

THE present short paper contains the germs of ideas which it is hoped to develop more fully at a later date. It is set forth briefly in order to elicit from logicians criticisms which may modify the form and substance of the fuller presentation.

Those who have read my paper on the "Methods of Applied Mathematics,"¹ which, if valid, has important scientific consequences,² will note that much of the exposition would be applicable, not only to mathematics, but to other forms of deductive reasoning. It is here proposed to indicate in outline within what limits such an application is possible and to call attention to a few collateral consequences. An exposition of the principles of mathematical reasoning is only capable of fuller application in so far as it is based on premisses which deal with mathematics as reasoning. That portion which deals with the specific characteristics of mathematics is irrelevant. It will, therefore, be convenient briefly to mention the affiliation of ideas and then to treat the subject *de novo* in its relation to logic.

The central idea of the treatment of mathematical reasoning was found in the assertion of an essential distinction between the sphere of concept and that of percept.³ Mathematical reasoning, especially in its aspect of absolute intuitive certainty, was classified as belonging to the sphere of concept. The relation between the iron rigidity of the conceptual process, and objective reality, or any aspect of it, is a metaphysical problem left obscure. It was, however, explained

¹ *Journal of Philosophy*, 30th September, 1909.

² *Journal of Philosophy*, 1st September, 1910.

Mind, January, 1910. The distinction, as here shortly expressed, is liable to be misunderstood. It hardly needs to be stated, that, in ordinary percepts, there is a considerable conceptual element; but the distinction between these and the concepts detached from the corresponding percepts and used in thought and reasoning, though not easy to define, is easy to recognise. Every distinction of this kind, needless to say, must be judged in relation to its context.

in considerable detail that this form of certainty could not be transferred to the world of percept. The applicability of the conclusions of mathematical reasoning to physical problems, or to concrete perceptual existence in any shape or form, was shown to vary with a number of conditions. At its best (*e.g.* Geometry) the validity was nearly absolute. In other cases, the conclusions were shown to bear no recognisable relation to concrete reality.¹

It has seemed to me probable that a number of doubtful points concerning the nature of deductive reasoning might be cleared up by a recognition of the validity of similar principles in so far as they are applicable. I shall, therefore, categorically, state the following two principles, which, when properly understood, will, I think, be accepted as obvious and then proceed briefly to elucidate a few simple deductions.

(1) Every proposition, in so far as it is made the premiss of any process of reasoning whatever, thereby becomes a concept or abstraction from reality, and the terms do not refer directly to concrete reality but to the particular system of concepts implied by the form of the statement.

(2) The deductions, in so far as they result from a correct process of reasoning, possess absolute validity only in reference to the same system of concepts to which the premisses apply.

The exact meaning of the term "concept" requires explanation. It will best be illustrated by a simple mathematical analogy. Every one, in practice, has a clear understanding of the meaning of the term 4. But any one who attempted to explain its exact meaning in the world of concrete reality would find himself involved in metaphysical difficulties. There is, of course, no *thing* in the concrete universe which can be described as 4. The term is an *abstraction from reality*, or, as I should prefer to name it, a concept. On a very few concepts of this kind all modern mathematics is built up. Now further thought will show us that a similar difficulty arises with all class names. That they *do* refer to *something* in concrete reality, we can accept as an axiom of metaphysics, but it is not easy to say exactly to *what* they refer.² And, I am maintaining here, the same applies to *all* terms in so far as they become steps in a process of formal reasoning. The italicised qualification is important. It must be clearly recognised that ordinary conversation and literature contain many methods, of varying validity, of arriving at truth.

¹ See article, *Jour. of Phil.*, 1909.

² On this point, again, see my article on "Evolutionary Empiricism".

Purely logical reasoning is but one of them. Nevertheless, the statement applies to logical reasoning as such.

The position will be rendered clearer if we note the form in which a process of reasoning is commonly expressed. Take, for example, the ordinary syllogism *Barbara*.

"All M is P.
All S is M.
All S is P."

This, it is contended, is the truly valid logic. The "terms" S, M, P have neither connotation nor denotation. They represent, merely, the blank form of reasoning. And here, it is clear that logical reasoning possesses precisely the same validity as mathematics. So far as the form is correctly observed, the results are absolutely valid and purely conceptual. Immediately, however, connotative terms are substituted for the blank forms the relation of the conclusions to, and their validity with regard to concrete reality, becomes a complicated problem which requires further investigation.

It will, of course, be recognised that *if* the premisses are absolutely correct (perfect abstraction from reality) and *if* the terms are absolutely rigid (*i.e.* used in precisely the same sense throughout the argument) and *if* the argument proceeds according to correct logical form no error can creep in. But it will equally clearly be recognised that, in practice, this absolute accuracy and rigidity is not and cannot be observed. In most simple arguments the conditions are fulfilled asymptotically. But even these contain the germ of fallacy.

The fundamental problem of logic thus becomes reduced to precisely the same form as the fundamental problem of mathematics. The ultimate sources of error can be described in precisely the same terms:—

"(1) That the abstractions on which the reasoning is based have, in a very small percentage of cases, absolute intuitive certainty or intrinsic accuracy. (2) That the concepts are never complete abstractions from reality, and the degree of the completeness can only be determined empirically by observation and experiment (p. 537)."

The working out of these conditions, with illustrative examples, it is proposed to defer to a future occasion. It will be noted that mathematics differs from other forms of logical reasoning principally in the rigidity of the terms and in the length of the chain. It will, therefore, follow that, amongst other ways, the necessary treatment of logic will require more careful analysis of the results of variation and

the meaning of terms, *i.e.* the non-rigidity of concepts. The consequences following from the length of the chain of reasoning, will, on the other hand, be less important. But these, and other problems, cannot be treated in a brief outline. It will suffice for our present purpose to note the fundamental position that all strictly logical reasoning is conceptual, that, in so far as it follows a valid process, the intuitive certainty is strictly limited to the conceptual sphere and the applicability of the conclusions to the object world is a problem which requires specific consideration.

Having stated this position, it will be interesting to note two consequences. The first relates to fallacies, the treatment of which, in modern logic, is generally regarded as unsatisfactory.¹ It will immediately be apparent that the old division into formal and material fallacies at once becomes fundamental. Formal fallacies correspond to errors in the mathematical process. But a new light is thrown on what have been termed "material" fallacies. These admit of no hard and fast classification. They become a factor more or less implicit in *all* reasoning whether that commonly regarded as valid or the contrary. A material fallacy is an inexactitude in the fitting of the conceptual series of logical reasoning to the perceptual series of concrete existence. It is always present, if only in infinitesimal degree. Only when this degree becomes great enough to be of importance does a "fallacy" arise. The treatment of "material" fallacies, thus resolves itself into another aspect of the conditions under which the results of logical reasoning are applicable to concrete existence, which, as we have already stated, it is not possible to treat in a brief outline. As and when the "fitting" is exact, fallacies vanish, at other times, fallacies abound.

The second consequence relates to existential import. According to the view here briefly outlined, this controversy becomes meaningless, and the problem of the existential import of propositions vanishes.²

Every term and every proposition is "existential" in the sense that it implies a concept and is not necessarily so in any other sense. The exact "meaning," or reference of the terms or propositions to the various "universes of discourse"

¹ *Keynes*, the standard book of the present time, gives no formal treatment whatever, merely regarding them as breaches of the rules of the syllogism, a treatment only applicable to *formal* fallacies.

² For the current discussion of this point see *Keynes*—"Formal Logic," chap. viii.

thus, according to the treatment here outlined, becomes entirely irrelevant to the validity of any and all possible logical inferences.¹ Moreover, there would be, in the light of this theory no meaning in ascribing "existential import" to subject rather than to predicate or *vice-versa*.

I am aware of the defects of this paper, of the inadequacy of the treatment to the magnitude of the problems involved, of the absence of the statement of the relation between the views here expressed and those of other thinkers. I must ask the indulgence of the logician for the defects inherent in a brief outline and for those peculiar to myself. It is my hope, however, to receive criticism and help from those competent to give it, before working out a fuller treatment of the essential ideas. These, however, seem to me to be of sufficient interest for publication in the present form.

¹ Keynes—"Formal Logic," chap. viii., § 159 *seq.*

VI.—DISCUSSIONS.

THE KERNEL OF PRAGMATISM.

IN its conception of the nature of truth lies the central position of Pragmatism. It is about this point that the contest between pragmatist and anti-pragmatist has been the most stubborn, and still endures apparently without prospect of either side definitely prevailing over the other. I do not propose to join the *mêlée*. The object of this paper is neither to support the pragmatic doctrine of truth nor to oppose it. Before doing either of these things it would be well to seek to understand it. That anti-pragmatists have not tried to understand their opponents on this point would be an injurious and, in general, an unjust thing to say of them, but they do not appear to have succeeded in their endeavour. Had they been successful they could I think hardly fail to have perceived that mere ratiocination, be it never so logical, is, as against this pragmatist conception, a perfectly futile weapon; they would see that to convict the pragmatist of error by mere argument is impossible. Who, knowing the reality of colour blindness, would endeavour to persuade the colour-blind that they persistently confuse colour-names? I beg the pragmatist's pardon for the suggestion of deficiency carried by the analogy. I assure him I am not prejudging the case: I suggest that if the anti-pragmatist understood the pragmatist's view, and found his own nevertheless unmodified, he would see that his proper attitude towards pragmatism is as simple and obvious as is his attitude towards colour blindness.

Pragmatists will correct me if I interpret them wrongly. The plain fact, if I mistake not, is that the pragmatist cannot discover in his own mind something—an idea, a conception, apparently of radical importance—which the anti-pragmatist discerns, or supposes that he discerns, in *his* mind. Now if this *is* the fact, it is useless for the anti-pragmatist to try to convict the pragmatist of a fallacy alleged to result from a confusion between this idea, which does not form part of the pragmatist's mental furniture, and another idea which is common to them both; for the conditions are in that case obviously such as to exclude the possibility of this confusion. This is what the anti-pragmatist must be brought to see if further fruitless discussion is to be avoided.

At first sight, certainly, what the pragmatist asserts as to the nature of truth seems simply and obviously an error. This

obviousness, it may be remarked in passing, should make the cautious doubly cautious. We have a statement, in fairly definite terms, of what, according to the pragmatist, really is in our minds when we say of this or that belief or judgment that it is true. As readers of *MIND* well know, the assertion is thrown into various forms, but these different forms are all practically equivalent in meaning and intention. The most simple is perhaps this: that to look upon a belief as true is, *in other words*, to look upon it as a belief that 'works'; this defines the meaning of the word 'true,' as used in such a context; this describes what we have in mind when we thus use the word 'true'. Now what is commonly held, I believe, is that we look upon the fact of a belief's 'working' as evidence that the belief is true, that we infer the truth of it from the (effective) working of it, that the truth of a belief is something quite different from what causes us to infer that it is true. This distinction seems so plain and so well established that one is at a loss to understand how the pragmatist can have overlooked it. But Mr. Bertrand Russell has given a very ingenious explanation of how this might easily happen, of how, as he thinks, it actually has happened.

'There is, in the first place,' says Mr. Russell, 'an ambiguity in the word "meaning". We may say "that cloud means rain" or we may say "*pluie* means rain". It is obvious that these two senses of "meaning" are wholly different. What they have in common is that in each case we have one thing which points to the other . . . if we are not mistaken, pragmatism has confused' the two senses of meaning 'in its inquiry as to the "meaning" of truth. It has discovered something which has a causal connexion with our beliefs that things are true, and which, therefore, in the first sense of "meaning" may be taken to be what these beliefs "mean". It has then supposed that this is what is "meant," in the second sense, by "truth," *i.e.* what we have in mind (or should have in mind?) when we use the word "truth".' In other words, what we have in mind when we say of a belief that it is true (*i.e.* the meaning of the word true) is a wholly different thing from the causes which prompt us to call it true; these causes of the belief are not what we mean by the truth of the belief, they are criteria or tests of the belief's truth. 'Thus,' Mr. Russell concludes, 'pragmatism does not answer the question: What is in our minds when we judge that a certain belief is true?'¹

The supposition is plausible, but it is almost certainly false; pragmatism really does answer this question, because it does not fall into the supposed confusion; but the answer is satisfactory only to pragmatists.

Mr. Russell's *Edinburgh Review* article is an elaboration of an earlier one in the *Albany Review* entitled "Transatlantic Truth".

¹ *Philosophical Essays*, p. 109. The essay from which this passage is taken originally appeared in the *Edinburgh Review*, April, 1909.

To the latter article William James replied in one of that collection of articles in book form which he published under the title *The Meaning of Truth*. But although several of the criticisms contained in "Transatlantic Truth" appear to be prompted by the belief in the existence of this confusion, the charge is not, as in the later article, explicit. We have to guess from James's reply how he would have met it. What he actually says is this:—

'Good consequences are not proposed by us merely as a sure mark, sign, or criterion, by which truth's presence is habitually ascertained, though they may indeed serve on occasion as such a sign; they are proposed rather as the lurking motive inside of every truth-claim, whether the "trower" be conscious of such motive, or whether he obey it blindly. They are proposed as the *causa existendi* of our beliefs, not as their logical cue or premise, and still less as their objective deliverance or content. They assign the only intelligible practical *meaning* to that difference in our beliefs which our habit of calling them true or false comports.'

To believe that Christopher Columbus discovered the new world, and to believe it to be true that Christopher Columbus discovered the new world are one and the same thing. It is easy enough to accept the view that good consequences of beliefs are *causa existendi* of these beliefs, notwithstanding its air of paradox; but the further proposition that they assign the only intelligible meaning of the difference between truth and falsehood is embarrassing. The position seems to be: Given a certain belief; let the consequences of the belief be good, we call the belief true; let the consequences be bad, we call it false. Thus the meaning of the word true (or false), as applied to a belief, is "comporting good (or bad) consequences". The anti-pragmatist must, however, object that although he may call the belief true if it works, he does so not because he regards the working of the belief as the truth of the belief but as an indication that it is true: the truth of a belief is a quality or property of that belief, the working is a sign that it has the property or quality.¹

Pragmatists seem rather to fence with this objection; but that, I take it, is partly because they do not wish the discussion to degenerate into mere assertion and counter-assertion, partly also because they are conscious of a sense (which is not that urged by the anti-pragmatist) in which there is a quite clear distinction between the meaning and the test of truth. James I believe would have dealt with this objection in substance (for in felicity of manner he is inimitable) as follows: If you please to assert that the truth of a belief is a quality of it distinct from its quality of working satisfactorily, I will not contradict you; but on my side I will assert that this quality, if it does exist, is indiscernible, never has

¹ Instead of "quality of that belief" he may say "relation of that belief to reality"; but it will presently be seen that in relation to the point in process of discussion the substitution would be unimportant.

been discerned, and apparently never will be. Neither you nor any one else has ever yet succeeded in giving an intelligible definition or description of it, though many eminent hands have tried since the dawn of philosophy. (This is evidently what is in James's mind when he beseeches his opponents to tell him what *their* truth is "*known as*".) Certain experiences give rise to a belief A, certain others to a belief B; these two beliefs in their turn respectively prompt certain expectations. You find that the expectations aroused by the belief A are, so far as you go, invariably fulfilled, while the expectations suggested by the belief B are not fulfilled at all. What difference have you discovered between the two beliefs other than that the one works and the other does not? Pragmatists cannot discover this other difference, they can form no conception of this quality in which *your* truth consists and it is therefore quite impossible for them to mistake another conception for it.

If this is the pragmatist's position the futility of arguing against it seems evident. You may call him "conception-blind" if you like, but he will only laugh and tell you that you are nursing an old, a very old superstition. It is clear also that from his point of view the distinction between the meaning of truth and the test of truth remains perfectly definite. It is sufficient to reflect that the meaning of a word is (to put it shortly) an idea, while a test is either an action or a process of ratiocination (*e.g.* the proof of a mathematical proposition); the idea of verification, of demonstration, of "working," is not the verification, is not the demonstration, is not the "working".

Rapidly turning over the pages of *The Meaning of Truth* on the chance of coming across any passages in it which might indirectly confirm the suggested interpretation of James's mental attitude towards the truth question, I come across these: "My account of truth is purely logical and relates to its definition only. I contend that you cannot tell what the word 'true' means, as applied to a statement, without invoking the concept of the statement's workings."¹ Again, ". . . for understanding what the word 'true' means as applied to a statement, the mention of such workings is indispensable."² Once more, "you cannot define what you mean by calling them" (*i.e.* statements and beliefs) "true without referring to their functional possibilities."³ There is no ambiguity whatever here in the use of the words 'mean' and 'means'. Concepts have verbal signs, they are the meanings of those signs. It might indeed still be urged that these passages do not absolutely dispose of the charge of confusion, but this seems no longer possible when attention is drawn to the form which James gives to these assertions. Why does he put it that *you cannot tell* what the word 'true' means, as applied to a statement, without invoking

¹ P. 221.² P. 219.³ P. 220.

the concept of the statement's workings, or without referring to its functional possibilities? Because he is convinced that between beliefs which work and beliefs which do not, you can discern no common difference but this of working and not working, otherwise expressed as the difference between true and false. He may be wrong about *you*, but that is here an irrelevant consideration.

It has been a frequent complaint of pragmatists that their opponents seek to confute them without first seeking to understand them. There would seem to be some ground for the complaint, and so long as this remains the case the sympathies of the unpartisan onlooker are likely to go out to the pragmatist. If pragmatism is gaining ground, as it seems to be doing, this may in part be because, as Mr. Russell says, "it is singularly well adapted to the predominant intellectual temper of our time,"¹ but it is in part due also to the apparent prejudice or the surprising lack of insight with which it has been opposed. Next to the leaders of pragmatism it would seem that no one has more effectively contributed to the spread of that philosophy than the militant anti-pragmatist.

HASTINGS BERKELEY.

¹ *Philosophical Essays*, p. 88.

TRUTH'S "ORIGINAL OBJECT".

IN his article "On Some Aspects of Truth" (*MIND*, July, 1911, p. 332) Mr. Bradley observes: "On any view like mine to speak of truth as in the end copying Reality, would be senseless. To copy is to reproduce in some other existence more or less of the character of an object which is before your mind. Now apart from knowledge and truth, there can be no original object before you to copy. And hence to make truth consist in copying is obviously absurd." And he regards this question as settled by the "post-Kantian criticism of the doctrine of the Thing-in-itself".

Now a truth-hypothesis, genuinely thought-out, takes us to metaphysics. And in commenting on this passage we must recall Mr. Bradley's own metaphysics—bear in mind what he has said about the nature of reality at large. He does not follow certain Hegelians and identify Truth with God. He disallows an "eternal consciousness" by which truths are thought and which has no content apart from truth and thought. But, nevertheless, Truth is a colossal fact in his universe. Truth, while not God, is an aspect of the Absolute Experience, "the whole Universe in its general character as it really is". We philosophers are cognising this aspect with varying degrees of success. And, time being unreal, we must be awaring, rather than making, the Truth-system. And so must be all the finite centres in which the Universe realises itself as truth. Again, outside and apart from these finite centres, human and other, there is no truth-realisation. The finite centres, as harmonised in the Absolute, are Truth's sole carriers.

Truth is not a possession of this or that individual, it is an aspect of the Absolute Experience—this is the dominating metaphysical assumption which confronts us here. In "the original object" present to finite centres there lies already in some occultly implicit manner knowledge and truth. For the moment let us pass this statement. Does the description of acquired truths as "copies" necessarily become absurd? Of course such truths will not "consist in copying," as process. They (or rather many of them¹) will be copies and the awareness thereof. A geologist or geographer, for instance, might very well be said to "copy"

¹ A great many truths cannot be discussed intelligibly as "copies" at all. Often we aware the truth directly in the reality of which it is affirmed.

certain truths of the independent system of truth which are displayed in Nature. Anyhow there is no intrinsic absurdity in the contention that truth externalised as Nature could give rise to secondary or derived "truths" in finite centres. We could well be supposed to *reproduce* parts of a system in our private concepts and in this sense to "copy" much at any rate of that which is cosmic truth.

The special difficulty in the case of Mr. Bradley's system is that he does not allow that truth and judgment exist apart from finite centres. Consequently both the primary cosmic truth and the derived truths would have to lie in the same centres. And since further, on his own showing, truths, as finites know them, are never completely true, he seems to drift into sheer chaos. Of course the reply will be that the Absolute is there to see that this chaos is really harmony. And there are folk, it would seem, whom this reply suffices to content.

But waiving this objection, I pass to more vital considerations. And first I must advert to Mr. Bradley's abuse of the "post-Kantian criticism of the doctrine of the Thing-in-itself". His attitude is—Either accept this fiction or agree with me that cosmic reality, in its general aspect, is truth. But we are not limited to these alternatives. The mark of the idealist is the view that sentient experience samples the stuff the universe is made of. And the idealist may reject belief in unknowable surds or things-in-themselves without at the same time overrating the position of truth. He may regard truth as no more than appearance in the time-process, as one of the *transformations* of the universal psychical life as it wells up in finite centres. This universal plastic life is what I have discussed as the Cosmic Imagination. And the word 'transformation' has special relevance to the controversy in which we are now engaged.

If asked what I have to say regarding Truth, I am forced first to state my metaphysics, failing which there is no understanding the "reality" which Truth, as ordered in a propositional system, is "about". And I should first substitute for Mr. Bradley's static Absolute Experience an Intuitive Alogical Imagination with its Days of change or time-succession and its Nights of changeless fruition. In the change-phase of our present Evolution-Era there have arisen in this Cosmic Imagination certain organisms, aspects of which (in our case the cortex) have passed into isolated 'centres' of conscious being. Let us consider specially the human finite centre. Owing to the fact that my conscious life is allied directly only with the cortex, I am confronted with a 'shadow world'; my surroundings in the Cosmic Imagination being barely notified by the dynamic of cortical process.¹ "My experience falls within

¹ I have endeavoured to show how space, time-succession, and order arose in the Cosmic Imagination. The shadow-world which I perceive must be most inadequate to the fulness of content in this Imagination.

my own circle, a circle closed on the outside," as Mr. Bradley would say, and the limits of that circle are determined by the brain; not by the "shadow-brain" which is all that the physiologist can perceive, but by the fully-concrete brain as it exists in the macrocosm or Cosmic Imagination. Within this petty circle takes place the evolution of subject and object and all that in them is. And for me the resulting experience is, at the outset, all in all. But since the so-called 'closed circle' is continuous, and of one tissue, with the enveloping order, and since that order is revealed indirectly by what it works in the circle, I am enabled, slowly and surely, to feel my way in idea out of the circle as practical and theoretic interests dictate.

Psychical happenings in the continuum of the Cosmic Imagination permeate the minor continuum or circle in which I appear. No need to have recourse to 'categories' wherewith to show how "reason" confronts me with an objective world.¹ The dynamic of this world-presentation seems allogical. No need to ask whether my knowledge 'makes a difference to' objects or not? Judgments imply attention, and the selective attention and the minor continuum in which selection rules are alike gifts—gifts of the Cosmic Imagination working through brain. It is only after 'outward' and 'inward' have settled into shape that the Centre as such can be said to begin to act. At first it is "run" by a dynamic of which it holds just the result. Its sensations, volitions, emotions, etc., are the surface of activities that are working below its level.

On these lines, then, "*the original object*" is not truth. Truth is one of the novelties of which the creative time-process is so full. The content of the minor continuum, as selected, appropriated, hived and re-arranged is taking on a new form. But the *transformation* is very gradual. Thus, at first, truth is still immersed in its "reality". At the outset Judgment does not even "*refer* an ideal content to reality"—there is just awareness of the content *in* reality, a partial awareness of fact over against a twilight background. At the farther end of the scale you have the philosopher's truth; a conceptual system, a bleak artificial arrangement of propositions which acquires a kind of standing of its own, being indeed an ideal substitute for a universe which, in its entirety, cannot fall within finite experience. If we want to verify portions of this system we have to ask how far its propositions agree with reality—have to bring truth *towards* that for which it stands. At this stage, and indeed in connexion with all conceptual or representative thought, the Correspondence-Hypothesis seems to hold—the dualism of truth and fact has reached its full development.

The defects of a truth-system, as embodied in propositions, are

We are like Plato's folk in the Cave—save that the superior world consists not of empty "Universals," but of richly sensible reality (*cf. Individual and Reality*, p. 159 *et seq.*).

¹ *Individual and Reality*, p. 180.

serious. The philosopher is a splendid pauper. His mental substitute for awareness of reality at large is too empty. He has grasped at a universe and his hands close on too little. May we not hazard the surmise that Truth, after attaining a certain development, has to give place to a superior form of knowledge? The individual, who cannot disappear in the time-process, grows through the ages towards a larger life in which a direct and completely concrete awareness has to replace conceptual Truth. But I cannot dwell on this fair possibility. And, of course, there are many other aspects of the Truth-controversy which I am ignoring here.

E. D. FAWCETT.

P.S.—With reference to Mr. Bradley's note (*MIND*, July, p. 335), I ought to say that I have not taken him to start from a "provisional Solipsism". I am not at all clear as to what his book *Appearance and Reality* does start from. It opens in startling fashion with chapters on "Primary and Secondary Qualities," "Substantive and Adjective," "Relation and Quality," and, plunging into the discussion of Space and Time, works thence in no clearly methodical way toward Absolutism. I start from a "provisional Solipsism" (subsequently found absurd) because so many ways of starting have been condemned that I wish to take as little for granted as possible. Now Mr. Bradley admits that "my experience falls within my own circle, a circle closed on the outside". Only so far as I know my own experience directly, can I know of anything else. And the "anything else," I suggest, remains always at the best theoretically doubtful. In the result I agree with Mr. Bradley that the finite centre is continuous with a larger order which penetrates and, as he would say, "infects" its being. But this is a conclusion which I do not care to assume, and towards which I have to argue.

Mr. Bradley himself has to show that his Absolute is not merely a concept *within* his "circle". The task, it is obvious, is no light one. For it is certain, as he observes, that the "highest all-embracing experience is never reached in any finite mind". Nevertheless he believes, "inexplicable" as is the truth, that the "whole Universe" is directly aware of itself in his circle.¹ In other words, the Absolute finds itself in him, although, taken apart from other finite centres, the Absolute cannot be real and although Mr. Bradley's entire experience is more or less unreal. Certainly this is "inexplicable". And a question arises whether it is not something worse.

¹ "But so as not there to be aware of the contents of any other finite centre as they are experienced immediately by itself within that other centre."

VII.—CRITICAL NOTICES.

Die Philosophie des Als Ob. System der theoretischen, praktischen und religiösen Fiktionen der Menschheit auf Grund eines idealistischen Positivismus, mit einem Anhang über Kant und Nietzsche. Herausgegeben von H. VAHINGER. Berlin, Reuther & Reichard, 1911. Pp. xxxv, 804.

THIS impressive work has had a remarkable history. The first part (pp. 1-327), containing the systematic discussion of the conception of 'fiction,' was written so long ago as 1876; part 2 (pp. 328-612) dates from 1877-8 and contains the special illustrations; part 3, a citation of passages from Kant, Forberg, F. A. Lange and Nietzsche, is based on collections made in 1875, but has been added to since, and contains also some references to current controversies. There are, moreover, two Prefaces, one signed by Prof. Vaihinger as the 'editor,' the other (unsigned) by the 'author,' who is not stated to be identical with the 'editor'. This curious fact, together with the abundance of misprints and the absence of any attempt to bring the contents of the work up to date, is no doubt connected with the distressing malady of the eyes which, to every one's regret, kept Prof. Vaihinger away from the Bologna Congress of Philosophy, to which the book is dedicated. It was clearly a case of publication now or never, and in the form in which the material existed or not at all, and Prof. Vaihinger is certainly right in thinking that the learned world would rather have so valuable a work in an imperfect form than lose it altogether.

The second Preface serves as an introduction to the whole argument by formulating as its central question the problem of *Fiction* and asking *how is it possible that with ideas known to be false we can yet attain right results?* and by explaining why its publication was so long delayed. Prof. Vaihinger explains, quite frankly, that he did not *dare* to publish it before, whereas now four influences have paved the way for it, *viz.*, the growth of Voluntarism (Paulsen, Wundt), the biological theory of knowledge (Mach, Avenarius), the popularity of Nietzsche, and the rise of Pragmatism. The whole passage is most instructive, and throws a strange light on the vaunted *Denkfreiheit* of the German universities. Here we have an extremely learned, highly scientific work, which if it had appeared thirty-five years ago would indubitably have made an epoch and enormously accelerated the progress of philosophy, deliberately

suppressed by its author, not because he feared deprivation or official censure (as many German philosophers have done in the past), but because he shrank from the odium of setting right the dominant dogmatisms of his colleagues! Why, this is quite as bad as anything we have elsewhere. But Prof. Vaihinger's avowal shows, not merely that *courage* is one of the great intellectual virtues (though his book is a sufficient proof that he himself has no lack of it), but still more that dogmatism and intolerance are as deadly enemies to science when they are found in university professors as in state-officials and that there is something gravely wrong, from a social point of view, in any system which produces these vices and gives them such opportunities.

However, we ought to be glad to have at last got Prof. Vaihinger's work, which is, as he says, the first systematic treatise on the epistemological function of *Fictions*, and considers its subject exhaustively in its scientific, ethical and religious aspects and with copious, and often recondite, illustrations from philosophic history. Incidentally it involves a new interpretation of Kant, which is regarded as the most *radical* form of Criticism, and as the secret doctrine of Kant himself in his more enlightened (or bolder?) moments, though Prof. Vaihinger of course knows Kant and his ways far too well to pretend it is the only interpretation and the only doctrine to be got out of his contradictory pronouncements. For this new 'Kant,' whose genuineness and truth to some at least of Kant's moods Prof. Vaihinger's quotations seem convincingly to establish, Prof. Vaihinger's great *Commentary* and his position as the foremost 'Kenner' of Kantian philosophy, will no doubt secure a respectful hearing, and the thorough discussion the German 'Kant-philologists' love, while it may also be a check on the attempts to turn Kant into a dogmatist which are so popular in other quarters. Thus here again the maxim holds that every new philosophy involves a new 'Kant'. But Prof. Vaihinger, though he is proud of his Kantian inspiration and apparently holds that Kant was big enough to be allowed to contradict himself as he pleased and that it is 'Philistine' to deny him this right (p. 639), and though he must know how his Kantian lore must impress and overawe lesser men, and how interestingly it illustrates the amount of valuable thought which histories of philosophy commonly leave out, does not pose as a mere disciple. He has an eye to the absence in Kant of essential modern ideas, like those of value and of the teleological nature of thought (p. 191), and is conscious of going beyond Kant. The real core of his system, and its real merit, lie in the thesis he has raised about the nature and value of Fiction and its relation to Truth. With the results of this investigation he conceives his philosophy as taking its seat on the extreme Left of the philosophic pandemonium as an "insight into the necessity of conscious fictions as indispensable foundations of our scientific inquiry, our æsthetic enjoyment, our practical action "

which "enfolds with a common tie the differentials of mathematics, the atoms of physics, the Ideas of philosophy, and even the dogmas of religion" (p. xv.).

It will be seen that the scope of Prof. Vaihinger's programme is enormous, and to appreciate it it will be necessary to consider I. his notion of 'Fiction,' II. his list of 'fictions,' III. his relations to Scepticism, and IV. to Pragmatism.

I. He begins by conceiving the soul in the modern biological way as active and (in a way) creative. It follows that as thinking is an organic function, its aim must be *practical*, viz., so to transform the material given by the senses that we can calculate the course of events and *act* successfully (chap. i.). All thinking therefore is *instrumental* (Dewey's word), and not its own end, and all thoughts are '*Denkmittel*' (pp. 95, 126, 181, etc.), and so 'fictions'. Thus the aim of truth throughout is, not a theoretic copying, or a comparing with reality, but a practical testing of the usefulness of ideas, so that "for a modern epistemological standpoint there can no longer be a question of 'truth' in the ordinary sense of the word" (pp. 5, 7). Thinking, being simply an instrument to find one's way about the world, which *substitutes* an ideal world for the real (pp. 22-23), has however to make use of *dodges* (*Kunstgriffe*) in order to attain its ends, and these are the *Fictions* which no science can dispense with.

Any departure from the given is 'fictitious,' though it is not necessarily a full-fledged 'Fiction'. The latter is distinguished from a 'semi-fiction' by the fact that it not only departs from reality and contradicts it, but also contradicts itself (p. 24). Indeed self-contradiction is "the most certain symptom of fictions" (p. 94). A 'fiction' is not however *intended* to express reality, and should be accompanied by this consciousness (p. 127). It should not claim to be 'fact' (p. 173). Thus a 'fiction' is definable "as any *conscious*, purposive but *false assumption*" (p. 130), or a "*scientific invention for practical purposes*" (p. 65). It should be sharply distinguished from an *hypothesis*, though they have been constantly confused so far. A hypothesis aims at representing reality and must not be contradictory; it claims theoretic value (p. 148), and (if it succeeds) produces understanding or real knowledge (p. 147), or explanation (p. 187). *Hypotheses* demand *verification*, and the rule for them is 'take the most *probable*' (p. 144); for *fictions* it is 'take the most *suitable*'. They can never be *verified*, because they begin by departing from reality (p. 152); what they require is *justification* by their usefulness; their value is practical and their fruit is successful calculation. They are in fact useful, fruitful and salutary 'errors' which contrast with sterile and harmful 'truths'. They may be called errors legitimated by their success (pp. 62-64, 190, cf. 143), and are heuristically indispensable. For all "*thinking is only regulated error*" (p. 217).

How is it then that, despite their logically atrocious character, they can work? Why simply because they are 'scaffolding,' destined to be taken down again (p. 147). So they do not affect the result. Also they are corrected, and compensate each other (chap. xxvi., etc.). And so perhaps in science, as in love, all's well that ends well.

II. So we might conclude, until we study the list of 'Fictions'. For hardly anything seems to escape Prof. Vaihinger's net. Keeping only to the big and fundamental notions of his list we find that he detects fictions in averages, mean-values, classifications, abstractions, types, symbols, forces, roots, individuals, atoms, things, qualities, faculties, universals, ideals, infinity, numbers, measures, (empty) space and time, and all mathematical notions, matter, the soul, substance, subject and object, duty, God, freedom, immortality, all 'absolutes,' all categories (which are only 'analogies'), induction, deduction, nay all judgment as such (chaps. xxviii., xxxv., especially pp. 138, 312).

When all these things have been added up, and subtracted from reality, 'what remains of the whole philosophic stock-in-trade,' the astonished reader may well ask, 'that is *not* a "fiction"?' Well, it would have been simpler to start with this remnant, or at any rate much shorter. For the only things that are not 'fictitious' transformations of reality, according to Prof. Vaihinger, are (1) the *flux of sensations*, which is the only thing *given* (chaps. xxxv.-xxxvii., etc.), (2) the *laws* of their succession (pp. 98-99), and (3) the fundamental *Formal Law of Identity and Contradiction* (pp. 124, 159). About the last two however Prof. Vaihinger does not seem at all certain (or consistent). On page 419 we are told that 'the law' also is in the end only an auxiliary idea comparable with the notion of species, which has been declared a fiction. Probably Prof. Vaihinger's meaning is that while the successions of events are 'given' and factual, their explanation by the notion of law is a 'fiction,' as indeed it can hardly help being, seeing that all the categories, including 'causality,' have been found to be fictions. Similarly on page 411 the Law of Contradiction is expressly said to rest on a fiction, and the whole of Formal Logic is called a system of fictions.¹

III. Is what remains enough to redeem Prof. Vaihinger's 'positivism' from the charge of *Scepticism*? He himself would reject the imputation of such 'logical pessimism,' as he calls scepticism, and insists that his doctrine is the purest Criticism (pp. 294-296). Nor of course does he think that the presence of contradictions in thought is a reason for scepticism (p. 229). Still he rates highly the services of scepticism, and sees clearly both that the dogmatist's demand for absolute theoretic knowledge inevitably generates it, because it demands too much from our instrument (*cf.* H. G.

¹ And of formally invalid ones at that! For the ordinary syllogism commits a *quaternio terminorum* (p. 214).

Wells' 'scepticism of the instrument'), and because thought is *theoretically* a failure (pp. 309, 316). If however scepticism is extended to the *practical* function of thought, it becomes inadmissible: for it is not legitimate to doubt that thought attains its practical end of ordering experience. Practically moreover scepticism has to acknowledge the truth of our ideas (pp. 229, 232). It is clear therefore that Prof. Vaihinger's rejection of scepticism rests entirely on pragmatic grounds.

IV. So does a great deal of the rest of his doctrine, though it is by no means easy to expound his exact relation to the views which are more or less accurately described as 'pragmatism'. There are indeed a large number of coincidences between Prof. Vaihinger and the pragmatists both as regards general philosophic attitude (he is an empiricist and rejects apriorism), epistemological principles, the details of his criticism of the traditional views, and even points of phraseology and illustration. To particularise the capital points, we may refer to his acceptance of the biological conception of knowledge and of its function as a means to action and the alteration of reality (pp. 93, 123, 176, 307, etc.); his conception of thought and its products as instrumental (pp. 22-23, 82, 88, 95, 126, 179, 232, 294, 310, 407, etc.); the emphasis on its purposiveness and convenience, irrespective of its 'truth' (pp. 132, 136, 215, 298, 305, 310, 406); the rejection of the ideas that thought aims at a *theoretic copying* of reality and not at *practical agreement* (pp. 5, 7, 93, 295), and is its own end (p. 181); the recognition of a process of selection and of a struggle for existence among ideas which is decided by their value (pp. 77, 101, 135-136); the perception that 'truth' is a *departure* from 'reality,' which attains its end although it apparently *falsifies* (pp. 288, 296); the proviso that both 'hypotheses' and 'fictions' must be validated by their working (p. 150); the recognition of the close connexion between truth and error, which leads him to subsume *both* under the notion of a means for calculating the course of events and to distinguish them as successful and unsuccessful means (pp. 193, 45, 136, 143). It would be difficult to quote from the most thoroughgoing pragmatists any dicta which go further than *e.g.* these, that "the proper purpose of thinking is *not* thinking itself and its products, but action and in the last resort *ethical action*"¹ (p. 93), that "the *first aim of logical thinking is practical*, logical functioning is a means to self-preservation. *Cognition* is only a secondary purpose, *in a way only a by-product of logical functioning*"¹ (p. 307), that "that idea is *TRUE* which fulfils the purpose of all thinking best"¹ (p. 136), that "*truth is merely the most suitable degree of error*"¹ (p. 193), that "cause and effect is only the abstract expression for *will and action*"¹ (p. 317); while probably no critic of Formal Logic, not even Hegel, has ever gone so far as to assert that "logically contradictory

¹ Italics the author's.

conceptions are precisely the most valuable" (p. 92), or that universals are "logically useful because they are logically impossible" (p. 410).

This ultra-pragmatism is not however the whole story. There is another side, or another mood, to Prof. Vaihinger, which does not fit in so well with pragmatism. It begins with what in view of what is coming seems an unfortunate remark in the Preface (p. x), distinguishing between 'critical' and 'uncritical' pragmatism and condemning the latter as "an epistemological utilitarianism of the worst sort" which renders philosophy "once more an *ancilla theologiae*" or even "a *meretrix theologorum* outright". It seems like an allusion to this view when it is said (pp. 760-761) that the sound Kantian doctrine of a 'double truth' has been 'corrupted' by American pragmatism which has entirely dissolved the scientific notion of truth in the relativity of the religious conception of truth. What renders this censure particularly puzzling is that according to Kant and Prof. Vaihinger himself the doctrine of the double truth allows, and even enjoins, a very elaborate system of theological make-believe, whereby those who do not believe in God or freedom or immortality are to behave *as if* they did believe these "useful, and *therefore legitimate*,¹ necessary fictions of mankind" (p. xv). Here the difference between Prof. Vaihinger and 'uncritical' pragmatism would seem to be merely that the former calls 'false' the indispensable beliefs which the latter calls 'true,' and as the former admits a *double* sense of truth and not infrequently calls the practically 'true' fictions true without reservations (*e.g.* p. 136, *l.c.*), this difference would hardly seem to warrant severe language. However their real explanation would seem to be that Prof. Vaihinger's denunciation of 'uncritical' pragmatism was not intended for any of the pragmatist philosophers, but, as he informed me, for certain theologians of his acquaintance, while so far from objecting to the genuine pragmatism, he long hesitated whether he should not call his own position 'critical pragmatism' rather than 'critical positivism'.

There can be no doubt that he comes very near pragmatism; but his final choice was probably a right one. For there are still to be mentioned doctrines of his which seem incompatible with pragmatism in any strict sense. Among these is the duplicity of truth as 'theoretic' and 'practical,' which leads him usually to deny the title of truth to any 'fiction' however valuable and indispensable, and forces him to admit the existence of harmful 'truths' and fruitful and beneficial 'errors' (p. 64), to disallow the inference from successful working to theoretic truth, and from 'subjective' necessity to objective reality (pp. 190, 327, 404, 603), to condemn any alteration of or departure from reality in a fiction as a falsi-

¹ Italics mine.

fication (p. 194), to deny that a 'fiction' ever attains the real (p. 449), and generally that it is possible to unite the good, the true and the real.

It is the paradox of combining these views with his pragmatism that renders the psychological strain of Prof. Vaihinger's position so severe, and explains why not even an acrobat like Kant has been able to take his stand consistently on the painful razor-edge of the 'philosophy of the *as-if*'. Indeed if Kant had been gifted with a sense of humour he would forthwith have abandoned the 'stand-point of the *as-if*' rather than write down the delicious passage Prof. Vaihinger quotes from his *Losse Blätter* (? *Fliegende*), "a reasonable man, when engaged in prayer, assumes miracles; but when engaged in business, he admits no miracle" (p. 719). In spite of its paradoxes however the position is widespread; it is, as Prof. Vaihinger shows, essentially that of Nietzsche, who suggests that the value of all things consists in their being false, that one ought to believe in God, not because he is true but because he is false (p. 789), and it underlies the popular distrust of the truth as probably painful and men's love of consoling falsehoods which they can pretend to believe.

However paradoxical and unnatural this belief may be psychologically, its logical genesis is quite clear. It arises from the retention of the empty intellectualistic notion of truth after the discovery has been made that actual truth does not conform to its model. If instead of declaring that this 'ideal' is void and meaningless, and that the abstract notion of truth must accommodate itself to truth's actual nature in the concrete, the former is regarded as the higher kind of truth, and called 'theoretic,' and the latter is disparaged as 'only practical,' the doctrine of a double truth must follow, with all its consequences. But it is a delusion of those who adopt this position to imagine that they *have* discarded the 'copy' theory of truth. Really they remain enslaved to it, though they have found out that it is useless. But for their continuing to think it the business of truth to copy (or represent or reflect) reality, although it plainly does not in fact either do or attempt this, there would be no reason to dub our practical procedures 'fictions'. It is interesting that on one occasion Prof. Vaihinger seems to see this. He says (p. 94 *s.f.*), "it was only an accommodation to the ordinary view when we provisionally took up the position that the ultimate aim of thinking is the cognition of the real". But if 'theoretic' cognition is *not* the aim of thinking, and if 'copying' is neither possible nor attempted, what harm is there in its 'departing' from the given (which admittedly is only a chaos), and what sense in calling it a 'fiction' for so doing?

The truth is that Prof. Vaihinger's ingenuity, in detecting fictions everywhere, overreaches itself. He leaves no 'facts' to be contrasted with his 'fictions,' and in consequence the latter become facts

optimi juris, and their procedures 'truths'. A discussion of his notion of Fiction will speedily reveal this.

If we consider the denotation and connotation of the term fiction in Prof. Vaihinger's use we notice that both are very wide. On his own showing the only thing that was indisputably *not* fictitious was the flux of sensations (p. 96).¹ Yet nothing is more clearly an *ens rationis* created for purposes of psychological analysis. We never actually experience 'sensations'. Our actual experiences come as *perceptions* of things and their qualities, and these are never 'pure' from admixtures derived from our past, our knowledge and our personality. It seems quite untrue to say even that our organs of sense have the capacity or the function of reproducing undistorted 'fact'. They select and they transform in myriad ways, and are themselves the creatures of past selections, choices and valuations. For are not the organs of every living being adjusted (more or less perfectly) to his mode of life? And was not that mode of life selected and chosen in preference to others, or to non-existence? Our very 'sense data' (if we will insist on talking about such figments) are therefore pervaded ineradicably by past valuations, and choices, ideas and ideals; and if such pervasion is called corruption, *all* are hopelessly 'corrupt'.

Or again, how is a *real* 'sensation' to be discriminated from an illusion, hallucination or dream? It would puzzle Prof. Vaihinger to assign any other criterion than its superior *value*. But value to him spells 'fiction,' and so his 'sensations' must stew in the same broth with the rest of our cognitive procedures.

But the very universality of 'Fiction' throws a profound doubt on the propriety of the term. It no longer serves to discriminate one thing from another in the epistemological hotch-potch.

After all does 'fiction' connote more than 'mental activity'? That certainly is all-pervasive, and the sooner all philosophers see this the better. But do we *want* to do without it? If not, why abuse it as 'fiction'? If everything that can be called truth can also be called fiction, the difference in the meaning of the two terms has disappeared. Nothing is gained, therefore, by extending the sphere of 'fiction' in this way. It is better to discriminate, nor is such discrimination either difficult or inferior in convenience.

I should prefer, therefore, a classification which distinguishes between *methodological* and *categorical* assertion among the manifestations of human cognitive activity. Methodological assertion implies merely a recognition of the scientific value and convenience of the assertion, irrespective of any future decision as to its ultimate status. What is now asserted for methodological reasons may or may not turn out to be acceptable as a statement of scientific 'truth,' it may or may not maintain itself either as a 'truth'

¹The fictitiousness of 'law' he himself admitted, while the Laws of Identity and Contradiction are not only 'fictions' but actually *meaningless* fictions in their Formal version (cf. my *Formal Logic*, chaps. x., xxiv., § 5).

or as a 'convenience'. Methodological assertion thus does *not* exclude categorical, nor does it involve 'fiction'. A 'fiction' should be regarded as a special case of methodological assertion which arises later, when the limits of its usefulness have been discovered, and it is seen to be impossible to claim full 'truth' for it, though its original usefulness still persists. Thus a *methodological fiction* is true and useful for certain purposes, but *known* not to be either for others. It thus expresses a further stage of scientific analysis than the *methodological assumption* which asserts merely the immediate value of an idea, and leaves its final status an open question. It can hardly be denied that such a position of a scientific doctrine is logically intelligible and psychologically common.

It should further be noted that neither of Prof. Vaihinger's criteria of 'fiction' seems to be adequate. The mere fact of our 'supposing a thing to be true' does not turn it into a 'fiction'. For we may 'suppose' it in quite a neutral way, and go on using it without defining it further, and even have no repugnance to discovering that 'after all it really is true'. *I.e.*, the phrase covers 'methodological assumptions' which are *not* 'fictions'. Nor again is the state of our consciousness decisive. We may suppose ourselves to be merely entertaining 'fictions,' and yet find to our delight that they were much more. Even the sciences sometimes entertain angels unawares, and, if it be not too irreverent, allusion may also be made to 'the old priest of Peru who *dreamt* he'd converted a Jew, and awoke in the night in the deuce of a fright, and *found it was perfectly true*'. In short some 'dreams' are 'veridical,' and some prophecies 'come true'. Even the 'atom' Prof. Vaihinger is so contemptuous of has, since his book was written, obtained some support for its claim to be a real physical entity from (the interpretation of) 'radio-active' phenomena. It cannot therefore be argued that because a conception begins its scientific career as a 'fiction' it remains one, and 'can *never* attain reality'. Departure from the 'given' is *not* the differentia of 'fiction,' because it is essential to *all* cognitive activity, and the inquirer's consciousness of fiction is no proof of it, because it is primarily only a psychological fact about his state of mind.

Now *the knower's state of mind* no doubt deserves far more study than philosophers have yet bestowed upon it, and Prof. Vaihinger also might advantageously have carried his analysis of the mental attitude of *using fictions* further. In particular the notion of the fiction's *working* might have been more detailed. For it does not seem to be the fact that a fiction, consciously recognised as such, ever 'works' and is useful as such. It is necessary to ask *as what* does it work, *qua* the element in it which is known to be 'false' or *qua* its 'practical' truth? Also, *for whom* does it work, for those who recognise it as a fiction, or for those who believe it to be true or at least *half* believe this or believe it at times?

Now (1) in the case of the fiction consciously used by a scientist

it is clear that its value depends on its truth, which is adequate for his purpose. To conceive a curve as a straight line and to construct a railway carriage to convey a certain number of men of 'average' weight is 'true enough,' because the 'errors' committed may be made infinitely small or assumed to compensate each other. Thus the term 'fiction' does not mean that the conception is 'false' throughout (in which case it would be a bad, useless and pointless fiction), but that its truth is known to have *limits*, beyond which it breaks down. It is not an 'absolute' truth for all purposes, and differs from ordinary truths in this that the limits of its applicability are definitely known. But it is in virtue of the 'truth' in it, and *not* in virtue of the (negligible) 'error,' that the 'fiction' is scientifically valuable. It is then an insufficient analysis first to call the whole structure a 'fiction' and a 'useful error,' and then by way of compensation to admit that it has 'practical' but not 'theoretic' truth. *All* truth is 'practical' in the sense of 'relative to some human purpose,' and the adjective is pleonastic. And error is not useful *qua* error. The philosophers who have difficulty in seeing this should sharpen their wits on an analysis of *the common lie*, which, though really more complicated, is analogous in that it too is a use of an assertion known to be false.

(2) This case of the 'lie' will also bring out how essential it is to an understanding of the working of 'fictions' that the persons *for whom* they work should not be ignored. For a 'lie' does not (normally) 'work' unless it is believed to be 'true'. The detected lie usually fails to influence those who have recognised it as such. Is not the case of moral and religious 'fictions' similar? Is it, *e.g.*, possible to behave *as if* something existed, while one is fully aware that it does not? Is it possible to pray to a God whom one believes (at the time) to be non-existent, simply because one recognises that if such a God existed it would be a good thing? What is it but self-deception to pretend that one can? Prof. Vaihinger might just as well commend the æsthetic value of acting *as if* fairies existed, or the economical propriety of curing the distresses of poverty by acting *as if* one were a millionaire. Yet those who followed his advice would manifestly qualify for lunatic asylums.

Clearly the working and the usefulness of moral and religious fictions must be understood differently. The persons who think them 'fictions' must *not* be identical with those who find them salutary, because they think them 'true'. The enlightened philosopher (or priest) who knows that there is no God, no freedom, and no immortality, will act '*as if*' there were by continuing to teach these doctrines *as truths* with his tongue in his cheek, because he judges them salutary for the preservation of social order and his own authority. He will say, *populus vult decipi*, and it is my duty (or at any rate my advantage) to deceive them. This is a more prosaic explanation of the 'working' of moral and religious fictions. It is likewise an old, old story that the rulers of mankind have always

believed, and often found, fictions 'useful' in this way. It is also the reason why intellectualists are so firmly convinced that truth (like liberty) is *not* a good thing, at all events for all but the very few. *But it is not pragmatism*, nor an improvement on pragmatism. It is a traditional bit of immorality in moralists, of untruthfulness in truth-seekers, which pragmatism has come into the world to abolish. And Prof. Vaihinger should really explain himself further as to how he conceives the 'usefulness' of 'fictions'.

It is to be hoped that he will adopt the course which both reason and morality demand; *i.e.* that he will drop the notion of a 'double' truth, which he cannot consistently hold after abandoning the belief that truth is intended to 'copy' reality, and deny that *in ultimate analysis*¹ there can persist a discrepancy between the true and the useful, and a conflict between the good and the true. In other words he ought to become a Humanist; but of course he cannot be compelled. The alternative is that he should become a sceptic, as all must do who have perceived the discrepancy between actual human knowledge and the 'theoretical' ideal of intellectualism, and yet refuse simply to cancel the latter, as a delusion, a misconception and an irrationality. But this scepticism, in which the rationalistic clinging to an 'absolute' truth which is visible neither in heaven nor on earth inevitably ends, is thoroughly arbitrary, superfluous and inconsistent. It is perfectly easy to get out of it by accepting the humanist conception of truth which we all use in all our thinking. The sceptic himself is quite incapable of disavowing it in his life; for though he professes to despise it as 'practical,' he has to use it in order to continue to live. If he were consistent he would speedily eliminate himself, by not thinking one thing *practically truer* than another.

This brings us to a curious fact which despite its goodly bulk neither Prof. Vaihinger's work nor this inordinately lengthy review (which is a tribute to its merits) has so far mentioned, *viz.*, what is really the most puzzling case of the working of fictions, and the only one which presents any difficulty to the humanist analysis of truth. I mean the case of beliefs which are biologically so indispensable that they prove themselves by *eliminating those who refuse to hold them true*. A very large number of our least contested 'truths' may be suspected to be of this nature, but it comes out best in the extreme case of the belief that life is worth living. Clearly no one can deny this belief, *and act on his denial*, without eliminating himself and so indirectly establishing the truth of what he believes to be untrue. Yet if he did *not* act on it, both he and others would be led to suspect the sincerity of his 'merely theoretic' pessimism. We thus get a very puzzling antinomy, and one which

¹ Of course it is necessary to provide first for all the cases of the use of non-truths which render the 'simple conversion' of 'all truths are useful' impossible. See my paper on 'Error' in the *Proceedings of the Aristotelian Society*, 1911.

no doctrine of an *as-if* helps to solve. For all the time that pessimists were thus being eliminated, and so powerful a bias was being produced in the race as to render it *incredible* that life should *not* seem worth living, nothing that could be regarded as a *rational* argument would be urged against the pessimist position. The situation should be the despair of rationalism, and (as remarked) forms a very pretty problem even for humanism. Without however probing deeper into subtleties of which current philosophy hardly yet suspects the existence, we may conclude by emphasising that Prof. Vaihinger's book, in spite of the points that seem open to criticism, contains such a wealth of material and of stimulus that no one should henceforth presume to discuss the problems of logic and epistemology without having read and digested it.

F. C. S. SCHILLER.

Body and Mind : a History and a Defence of Animism. By WILLIAM McDougall, M.B., formerly Fellow of St. John's College, Cambridge; Reader in Mental Philosophy in the University of Oxford. With thirteen diagrams. London: Methuen and Co. Pp. xix, 384.

THIS is undoubtedly a book of great interest and importance. So far as I am aware, there is no other in which the whole problem of the relations between body and mind is so fully and carefully treated. The fact that it is written by one who has specialised both in physiology and in psychology gives it a unique authority; and in many respects it may be described as masterly. Some may no doubt be inclined to regard its sub-title as indicating a defect; and I am not altogether prepared to deny that there would be some justification for such a view. It is an advocacy—and even to some extent a popular advocacy—of a particular theory, rather than an unprejudiced inquiry into all possible theories; and probably the term that is used to characterise the theory that is advocated will be apt—not entirely without reason—to provoke a certain amount of antagonism. To any careful reader, however, it must be obvious that, in spite of its strenuous and spirited advocacy of a particular doctrine, it is thoroughly judicial in its tone and singularly fair and comprehensive in its treatment of opposing theories. In the end, even those who set out with some preconceptions against anything that can properly be described as animism will be led to admit that the theory here advanced is at least a reasonable one, and that the arguments put forward in its support are weighty, well thought out, and not easy to refute.

The book begins with a historical sketch, showing the way in which animistic conceptions have grown up, the developments of thought by which they have tended to be discredited, and the considerations that have led to their revival in recent times. For this

part of his work Mr. McDougall does not claim any originality, and it is certainly the least valuable part of it. He does not appear to have always consulted the best authorities. The account, for instance, of the growth of early Greek philosophy seems to ignore some of the most recent views. Mr. McDougall evidently accepts without question the old tradition (rejected even by Zeller) that Protagoras was a disciple of Democritus (p. 16), and takes no account of the fact that most historians now believe Protagoras to have been a flourishing teacher when Democritus was a boy. The dates given are also a little confusing. Sometimes they are the dates of birth and sometimes those of active work. The omission of any reference to the Eleatic school is another rather serious defect in any account of the growth of Greek speculation. The account of modern philosophy is perhaps less open to criticism. It is somewhat confusing to find Spinoza dealt with as if he were subsequent to Leibniz; but in this case the departure from chronological order is at least pointed out (p. 57). More serious is such a statement (p. 74) as that 'Kant's attempt was, by combining the scepticism he had learned from Hume with the idealism of Berkeley, to achieve a position which might claim to reconcile and to combine in a higher synthesis all that was most vital in the opposed dogmatisms'. Surely the only relation of Kant to the 'idealism' of Berkeley was that he tried to refute it. He no doubt pointed the way to another sort of 'idealism'; but even of this he only had, as it were, a Pisgah-sight (as indeed Berkeley also had).¹ In spite of such defects, however, the account of the development of philosophical thought given by Mr. McDougall will be found useful and in the main reliable by non-philosophical readers.² But the main interest of the work begins after this introductory part is completed.

What follows is a searching inquiry into the various ways in which the relations between body and mind have been conceived, with the view of establishing the central thesis of the book, that there are only two main doctrines that are worth considering—that of Parallelism and that of Animism, corresponding broadly to a

¹ It is a great pity that these two meanings of 'Idealism' (unfortunately there are even more than two) cannot be definitely distinguished by using the term Mentalism or Subjectivism for the one and Spiritualism for the other. But perhaps it would be still better if labels of this kind could be dropped altogether. We seem to be nearly all idealists and nearly all realists, just as we are nearly all socialists and nearly all individualists. The difficulty is to know exactly what such terms mean.

² I might add that, in giving an account of the development of modern philosophy, it would have been well to bring out more definitely the fact that it was the Cartesian dualism, and the doctrine of 'representative ideas' connected with it, that gave rise to the chief difficulties with regard to the relations between body and mind; and that it was the gradual breaking down of these theories that made more satisfactory accounts possible. But Mr. McDougall cannot fairly be blamed for not fully bringing this out; since, if I understand him rightly, he does not himself believe it.

materialistic and a spiritualistic interpretation of the facts. The different types of parallelism are very fully explained with the help of simple diagrams. The scientific theories that have led to the rejection of animism and the acceptance of parallelism are then carefully set forth and dispassionately examined. In particular, the influence of the doctrines of the conservation of energy and biological evolution is very clearly brought out. The defence of animism follows, being sustained by considerations of a physiological and biological, as well as of a more purely psychological character, and also by arguments drawn from the results of 'psychical research,' reinforced by some occasional pragmatic pleadings. More purely metaphysical discussions, though not altogether ignored, are held in the background.

On many of the points that are thus raised—especially those that are more purely physiological and biological—I am of course hardly competent to express an opinion; and even on the others I offer the following comments with a good deal of diffidence.

It appears to me a little misleading to say that Parallelism and Animism are the only real alternatives between which we have to choose. This can only be maintained if the meaning of both terms is somewhat strained. If the terms are interpreted in a wide sense, there is no opposition between them. Among leading philosophers, it might even be urged that Leibniz is one of the most conspicuous supporters of them both. If, on the other hand, the terms are interpreted in a more rigid sense, it is surely possible to hold views that cannot properly be expressed by either. In general, it seems true to say that neither of these views can be maintained, in any very definite sense, except on the basis of a thorough-going dualism. A complete Monism can hardly without great strain adopt either view, except as a provisional working hypothesis—a sort of 'useful nonsense,' in Mr. Bradley's phrase—for the purposes of psychology. It seems clear that there cannot be parallelism, in any very intelligible sense of the term, unless there are two quite distinct things—or at least two quite distinct aspects of things—to be parallel to one another. Hence a pure materialism or a pure spiritualism can hardly recognise anything that can properly be described as psychophysical parallelism. But animism also, in the most definite sense in which it can be understood, seems to imply the operation of souls on other things that are not of the nature of soul; so that this also appears to be incompatible with any thorough-going Monism. It is, I think, largely for this reason that so many modern philosophers, as Mr. McDougall notes (p. 179)—especially those who have taken Kant as their starting-point—have tended to regard all such theories as antiquated.¹ I agree

¹ I suppose it is true to say also that such philosophers have been, in general, so much absorbed in the more fundamental problems of epistemology as to have but little time for these more special and detailed inquiries. This, I suppose, was what was meant by William James in calling their doctrines 'thin'.

with Mr. McDougall, however, in thinking that the acceptance of some form of Monism does not absolve us from the discussion of the general problem of the relation between body and mind. It is still necessary to consider how it is that modern physical science seems to offer a complete theory of the nature of body without reference to mind.

In this connexion it may be well to notice Mr. McDougall's contention that one of the advantages of the animistic hypothesis, as contrasted with that of psychophysical parallelism, is that it does not commit us to any metaphysical theory. The only theory, he tells us, that animism, as a psychological hypothesis, necessarily excludes is that of Solipsism. If so, we might well go farther. Surely Solipsism can hardly be dignified with the name of a theory. It is little more than a *reductio ad absurdum* of certain types of subjectivism. It only means that, according to certain theories, any assignable individual has no valid ground for affirming the existence of any other individual. But any one who really goes so far as this inevitably goes farther. He must add, like Hume, that there is no valid ground for affirming the existence even of the individual Self as anything more than a number of conscious states. If this is Solipsism, it is Solipsism without an *ipse*. It is, in short, scepticism—not a positive theory at all. And I hardly think it can be maintained that even this attitude is incompatible with either Parallelism or Animism, taken simply as working hypotheses for psychology. The sceptic or solipsist, like any one else, may very well recognise that it is possible in some sense to have a science of body and of mind as they appear; and he may regard the hypothesis of an active soul as a convenient working hypothesis for such a science; or he may think it more convenient to treat the two sets of appearances as parallel. Even Hume frequently refers to the 'soul' in this way.¹ Taken simply as convenient psychological hypotheses, it seems to me that parallelism and animism are much on a par, so far as their metaphysical implications are concerned. The one may be said to lean to materialism and the other to spiritualism; but both are most naturally interpreted in terms of dualism.

It seems to me, however, that we might go even farther than this, and maintain that the hypothesis of animism is not incompatible with that of parallelism. For animism may quite well, as Mr. McDougall allows, be interpreted in a materialistic sense. It simply involves an extension of our conception of the material system, similar to that which is involved in the recognition of the luminiferous ether.² We may suppose that there is within the brain some subtle form of extended substance which is the organ of the higher

¹ *Treatise of Human Nature*, book i., part i., sect. 7. 'The word . . . touches the soul'; 'Those very ideas that are thus collected by a kind of magical faculty in the soul'.

² Compare the etheric body (*Linga sharira*) of the theosophists.

forms of self-conscious life, which is capable of serving as a medium for various modes of telepathic communication, and which may even pass from one physical organism to another, and perhaps survive for a time apart from any connexion with a physical organism. Such a conception would, I suppose, be animistic. Indeed it seems to be what is commonly understood by animism. But the substance thus thought of would still be, in a wide sense of the word, material ; and the question would still remain—How is this material to be supposed to be related to consciousness ? The answer to this question might still be given in terms of Parallelism. It might still be said that the consciousness that goes with this substance corresponds to its structure and movements. Hence it seems to me that, even if we regard a special type of soul-substance as an established fact, we should not have thereby subverted the theory of Parallelism, and should only have extended our conception of the material system. It might still be maintained that the soul-substance, which would seem to be at least spatial, interacts with other material substances, but that consciousness remains as a thing apart, following its own laws of life and growth.

Now, it seems to me that the greater part, if not the whole, of the arguments adduced by Mr. McDougall, would lead only to the establishment of animism in this sense, and consequently would not be incompatible with parallelism or even with epi-phenomenalism. He urges, for instance, with much force, that we cannot point to a physical organ for the higher operations of consciousness, as we can for simple sensations and for the more mechanical types of memory. He urges also that the facts brought to light by 'psychical research' seem to require for their explanation something more than the commonly recognised forms of physical communication. There is much force in all this ; but it may quite well be urged that it only points to the necessity for an enlarged conception of the forms of material existence and of the methods of their interaction. The question of the relation of all this to our actual conscious experience would still be a subject for further inquiry ; and it might still be maintained that the connexion between them is not causal. Further, if we interpreted animism in this way, it is to be feared that it would not give so much support as Mr. McDougall seems to think to the doctrine of human immortality. The soul-substance might still survive the physical body, but its existence would be impoverished, and it would seem natural to suppose that, unless it found some new habitation, it would speedily deteriorate and become dissipated. Nor do most of the facts brought to light by psychical research¹ appear to lend countenance to anything much

¹ I refer of course here to the facts as definitely published. I am well aware that many people (of whom Mr. McDougall appears to be one) claim to have had personal experiences that cannot be thus interpreted. But, until these are fully brought to light, it is impossible to estimate either their value as evidence or the nature of the conclusions to which they point.

more than this. Hence I do not find Mr. McDougall's account of the support which Animism, taken simply by itself, would give to the higher aspirations of mankind, altogether convincing.¹ Most people, I imagine—to put it somewhat bluntly—would choose to go out at once like a candle rather than to linger on for a while as gibbering shades. And it seems to me that, even if we admit that animism, in some such sense as this, is fairly established by the empirical evidence, the great question—Interaction or Parallelism?—remains very nearly where it was. I admit, however, as I think every one must, that the recognition of such facts would place us in a better position for dealing with that question; and perhaps this is all that Mr. McDougall means to claim.

But he has yet another line of argument. We have already seen that he attaches considerable importance to what he describes as the theory of Solipsism. He refers to this pretty frequently. In fact, he appears to be haunted by it throughout the whole course of his work. He repeats over and over again that the only way of escaping from Solipsism is by means of the idea of causation; and I am inclined to think that this is the ultimate foundation for his faith in the doctrine of interaction. His view I take to be that, but for the recognition of some kind of interaction, we should be absolutely confined within ourselves. The following passage is the one in which this view is most definitely stated. 'We affirm that each of us can escape from Solipsism only by an act of faith or will that posits a real world, of which he is a member. This real world appears to each of us in the form of the phenomena of sense-perception; but, if he is not to remain a solipsist, he must affirm and

¹ In this connexion I ought perhaps to refer briefly to the use that is made by Mr. McDougall of arguments of a pragmatic type. Though perhaps hardly a pragmatist, I should gather that he has a distinct leaning in that direction. He makes it clear throughout that he attaches considerable importance to the consequences of his doctrines. In his Preface he states his belief that 'the future of religion is intimately bound up with the fate of animism'. He adds: 'I am in sympathy with the religious attitude towards life; and I should welcome the establishment of sure empirical foundations for the belief that human personality is not wholly destroyed by death. . . . It seems to me highly probable that the passing away of this belief would be calamitous for our civilisation.' Some may think that too much is made of considerations of this kind; and I am certainly inclined to the view that it is a pity to put them in the forefront of a scientific discussion. If such arguments were to become current, we might end by submitting the psychophysical problem to a Referendum. But it is right to add that the actual discussion of the question is little, if at all, affected by such considerations. Pragmatic arguments are introduced mainly as *argumenta ad homines*. It may be urged also that, even if such arguments should not weigh with us in forming our opinions, they may be of some importance in considering whether our opinions should be widely circulated or kept dark. On the whole I believe that, even the most strenuous opponents of pragmatism would recognise, on careful consideration, that he does not make any illegitimate use of the consideration of consequences of a definitely practical kind.

believe that these appearances are not created by himself, but are due to influences or existences, not himself, yet affecting him. Or, in other words, he must believe in the validity of the category of causation; for only by believing that his perceptions are caused by some influence, some real being, other than himself, can he escape from Solipsism' (p. 180).

Now, I believe this argument to be quite fallacious.¹ As I have already indicated, the importance attached by Mr. McDougall to the theory of Solipsism seems altogether undeserved. Solipsism is, as Mr. McDougall himself recognises, a manifest absurdity. As Edward Caird used to put it, the question How we are to get out of our-elves, raises the previous one, How we ever got into our-selves. The consciousness of self is no more immediate or direct than the consciousness of that which is distinguished from self. The unfortunate *cogito ergo sum* of Descartes has much to answer for; and though Kant dealt pretty faithfully with it in his *Refutation of Idealism* it continues to recur in philosophical speculation. I am afraid that the doctrine of Prof. James Ward—the unsatisfactoriness of which is recognised by Mr. McDougall—rests on the same foundation.² Yet it seems clear that we know colours and sounds and smells and space and time and many other things quite as directly as we know ourselves; and that, as soon as we attach any definite meaning to self at all, we are aware that we are not colours or sounds or smells or any of the other things that we thus distinguish. We apprehend a world of objects from the very first; and it would be just as reasonable to say There is nothing but smell, as There is nothing but self. Of course we may hold that the world of objects that we apprehend is, in some sense, Appearance or Maya; but then we may hold this about our own conscious life as well—as Kant, for instance, did. But we cannot doubt that we are somehow conscious, and that we are somehow conscious of a world. Surely then Solipsism may be ruled out of court. We know that there is a world of distinguishable objects. The only questions for us are, What are these objects? How are they related to the subject and to one another? What interpretation are we to put upon them? In dealing with these questions causation may be important; but it is not wanted to refute Solipsism. Solipsism refutes itself (as indeed Hume was pretty well aware).

On these grounds I am led to think that the defence of animism against parallelism is unsatisfactory. What is really wanted is something that will raise us above both, by refuting the dualism upon which they rest. It is the Cartesian dualism, born of the

¹ It seems clear that it could only be accepted in any case, as a pragmatic argument. The same remark applies to the corresponding argument as used by Descartes—*e.g.* in the fifth of his so-called 'axioms'.

² The fuller and more impressive form in which it has been recently set forth in his new *Gifford Lectures* does not appear to remove this fundamental defect.

cogito ergo sum, that is the source of all the difficulties. Now, an attempt might be made, and sometimes has been made, to remove these difficulties from the side of Materialism. It might be said that the error lies in not including enough in our conception of matter. Descartes really did his best to exclude everything but pure space from the conception of matter, as perhaps some of the Pythagoreans and Eleatics may be said to have done before him. Modern science does not follow them in this, but rather tends to think of matter as something capable of spatial movement, in accordance with certain ascertainable laws. But it might be urged that we ought to include more in our conception of matter. We ought to recognise qualitative differences as arising in it under certain conditions, and life and consciousness as being included among these. We ought to recognise, it may be said, that along with the persistence of that quantitative aspect of material reality which is called energy, there are constant transformations of its more qualitative aspects in accordance with certain laws. It might be said, for instance, that a flower really has a qualitative aspect corresponding to what we call its colour; and that the movements of plants may be affected—*e.g.* in the case of fertilisation—by the fact of their colour; and that the recognition of this need not interfere with the theory that the quantitative aspect described by the term energy is persistent. Further, it might be held that consciousness is one of the qualitative distinctions that belong to certain types of material being. A theory of this kind would represent the universe as all of a piece, and in that sense would be monistic, though no doubt it would also represent the Universe (if it could be so called) as a plurality of distinguishable qualities. If I understand them rightly, the views of some of our newer 'Realists' approximate to this. But of course the question might still be raised, whether such a pluralism is not capable of being interpreted in the light of some larger unity or systematic order. If so, it seems clear that such a unity or order would have to be interpreted as spiritual. I believe that a conception of this kind, if it could be worked out, would carry us beyond both parallelism and animism. But evidently it would have to be supported by arguments of a more definitely metaphysical type than those that are presented by Mr. McDougall.

It is the duty of a critic to criticise, and I have endeavoured to fulfil that function. I have tried to indicate various respects in which the book seems to me to be defective or unconvincing. What I have chiefly sought to urge is that a sounder epistemology and a more definite metaphysic are needed for the thorough discussion of the problems with which it deals. While I am in the way of fault-finding, I may add that it is disfigured by a considerable number of rather annoying misprints. But I wish to end, as I began, with an expression of my hearty admiration for this solid and in many respects convincing work. There are several important aspects of

it to which I have been unable to do justice within the limits of a review. There is a cumulative force about the arguments that are brought forward in it, which can only be properly appreciated when it is studied as a whole, and which cannot be wholly destroyed even by valid objections to particular statements. It at least makes out a very strong case for the adoption of animism as a provisional hypothesis, and contains many valuable suggestions towards its further interpretation. It is written throughout in a clear and vigorous style; and the arguments are driven home by means of copious and often very illuminating illustrations. It ought certainly to be read by every one who desires to appreciate the present state of knowledge on the subject. It should be recognised as a classic on that particular theme.

J. S. MACKENZIE.

Études d'Histoire et de Psychologie du Mysticisme. Les grands Mystiques chrétiens. HENRI DELACROIX. Alcan, 1908.

THIS book, as the author tells us, is not a sequel to his *Essai sur le Mysticisme Spéculatif en Allemagne au Quatorzième Siècle*. It deals rather with the experiences than with the theories of the Christian mystics, and is in fact a psychological examination of Christian mysticism as exemplified mainly in St. Theresa, Madame Guyon, and Suso. In preference to a wide field less thoroughly examined, the author seeks to base an interpretation of this mysticism upon a close analysis of leading cases, pre-eminent and yet typical. This plan is in accord with his attitude towards the subject-matter. For him mysticism is essentially positive, organic, synthetic. It therefore has its higher and lower, its complete and incomplete, forms. The great mystics represent a great mysticism, and with their help we can study the imperfect through the relatively perfect, the true import of often arrested tendencies by the goal which a few have reached.

And yet he differs from the theologians. "Nous croyons que les états les plus sublimes du mysticisme n'excèdent point la puissance de la nature; le génie religieux suffit à expliquer ses grandeurs comme la maladie ses faiblesses" (p. xix). This sentence indicates well his position; a position which gives to his work a value and significance of its own. This should be acknowledged even by those who would have welcomed a more ontological interpretation of the facts. A writer who stands between the supernaturalists on the one side, and those who propound minimising solutions on the other, is excellently qualified, with the knowledge and penetration that M. Delacroix possesses, to test the resources and the limits of the psychological method. He sets out with the determination to respect the integrity of the facts. And, in so doing, he discovers a continuity, teleology, and constructive efficacy in the lives of the

great mystics which constrains him to relegate pathology to a secondary place. He listens with respectful, and even sympathetic attention, to everything that they have to say. As against Prof. Leuba's theory that the mystic trance is identified, after the event, with the notion of the Deity as mysterious and infinite, he remarks that St. Theresa "déclare fortement et à plusieurs reprises que la conscience de la présence divine est d'autant plus marquée que les états extatiques sont plus élevés et que l'obnubilation qui l'entoure, est plus profonde; à ce degré elle est fréquemment accompagné de connaissances plus particulières, de visions intellectuelles" (pp. 385-6).

The exclusion of supernaturalism together with a strict limitation of pathology means, of course, that the sub-consciousness rises to a position of extraordinary dignity and importance. "Une force que la Sainte appelle l'action divine, la grâce divine, et que la psychologie ramène à l'activité subconsciente, règle désormais l'afflux imprévu et involontaire d'états riches et féconds qui lui apparaissent comme la réalisation progressive de la vie divine en elle" (p. 10). The inhibiting of sense and intellect releases the activity of this larger self. A central intuition displaces discursive thought and draws even the practical life into its orbit. It is by its own nature expansive (see p. 361). In the case of Madame Guyon, an organised and profoundly intelligent automatism supplants the multiplicity of local and particular reactions in the practical life.

The intuitions and automatisms of the earliest stage of the mystic career are followed by a period of stress and darkness which leads to the third stage, the final establishment of this central intuition which displaces the old ego-centric life, both in respect of cognition and in respect of volition. In this first stage the mystic has been thinking of his own enjoyment of God; he has lived from his own centre; his highest experiences have been occasional, not continuous and fundamental. The second stage, which detaches the mystic from these more superficial supports, prepares him for his establishment on the solid basis which he recognises, when it is reached, as his goal. This process, familiar to the student of mysticism, is studied by M. Delacroix in its organic integrity, as it could hardly be appreciated either by the narrowly naturalistic or the narrowly theological critic. Hence the emphasis falls, not on immediacy, but on process. The particular experiences, as the most thoughtful mystics themselves did not fail to see, are to be understood in the light of their effects. "Nous avons montré que les descriptions des mystiques permettent d'apercevoir sous l'immobilité cataleptique et l'obnubilation de l'extase, sous l'agitation inquiète et la dépression de la seconde période, sous le somnambulisme extatique de la troisième, les grands intuitions, de caractère intellectuel et affectif, qui vont s'approfondissant et se répandant, et une grande impulsion continue, cohérente avec elle-même et tenace, qui dispose la vie comme un inflexible et clair vouloir" (p. 342).

This, in a word, is the aspect of mysticism which determines the method and conclusions of these illuminating studies. And there is one essential feature of M. Delacroix' treatment of the subject that must be noted, for it is closely articulated with the conclusions just indicated. The Christian character of this mysticism is, for him, fundamental. "Malgré les apparences parfois contraires de l'absorption dans le Père, il est au fond le mysticisme du Fils. Il aspire à faire de l'âme un instrument divin, un lieu où la force divine se pose et s'incarne, l'équivalent du Christ, et l'âme désappropriée et déifiée est entraînée par la motion divine aux œuvres du salut" (p. xiii). The progressive identification of action and contemplation is the very foundation of Christian mysticism (p. 251). But not only is this so. The particular traditional beliefs are not merely tolerated, but intimately adopted by this intuition that loses itself in the abyss of ineffable Deity. The assurance of their truth belongs integrally to that systematic self-expression which the intuition itself requires and attains to. No one of course would accept a creed on the ground of another's claim to immediate certainty. But none the less we are here brought to the verge of epistemology. The author's explanation (pp. 395-397) probably goes as far as any psychological explanation could go, but we only feel the more that Psychology, in these higher regions, becomes unequal even to the problems that start up on its own path. Yet let it be noted that he does not dogmatise against ontological explanations. In a letter to the Abbé Pacheu he explains his attitude perhaps more explicitly than in the work under review (*L'Expérience Mystique*: Jules Pacheu; pp. 305-307). He says that though it is not the business of Psychology to recognise or to deny the supernatural, yet it may be led to deny particular supernatural explanations. This is reasonable, but the instance he gives seems to overpass this principle: "Je me suis efforcé de montrer que, chez les mystiques, le progrès de la vie spirituelle était un développement interne, qui peut s'expliquer psychologiquement". But, setting aside the term "supernatural" which rather prejudices the issue, in what sense can Psychology be said to "explain" the *whole situation* exclusively of ontological theories? This is a different thing from its right to question the attribution of particular phenomena to supernatural irruption. He admits, however, that a further question lies beyond: that of the correspondence of the order of nature with the order of "grace," though he points out, that the conception of nature at which we arrive by positive methods will regulate our corresponding conception of grace. Still, though he himself holds his views without reference to any "positive religion," he considers that "les grandes œuvres humaines sont pénétrées d'un esprit et portées par un esprit qui dépasse chaque moment de l'humanité pris à part, et qu'il y a ainsi dans l'humanité un mouvement qui la dépasse: ceci pourrait être interprété de façon religieuse".

On the whole, the ontological interpreters need not quarrel with

M. Delacroix. It is surely well to naturalise everything till Nature herself reveals her essential limitations and pleads bankruptcy. It is eminently satisfactory that the essential difference between him and them—for such there certainly appears to be—can be focussed at one point. Allusion has been made to the sense of direct assurance of the truth of specific traditional doctrines, because it is here that relations between the ontological and the subjective interpretation are most strained. Now, in the first place, it seems clear that Christian mysticism differs in kind from the Hindoo type, and that self-expression, both intellectual and practical, is necessary to its maintenance and development. This seems to involve a positive cognitive implication at the very heart of the central intuition; in other words, it is genuine intuition and not a form of mental stultification. Self-consciousness, as M. Delacroix understands it—with his admirable refusal to explain anything away—is, in the great mystics, essentially constructive. But the further question will always remain,—in what sense is *all* consciousness constructive? What are its materials? What is the scope of receptivity in all cognitional processes, especially when they reach new levels and minister to vital expansion? In any case most philosophers would ask him to recognise at least an *x*-object correlated to an intuition that, by his own exposition, is implicitly all-embracing and finds some sort of expression in discursive thought. Then the question arises, can we best conceive this *x* as a point or as a plenum? Both conceptions would suit its central and organising character. But the latter would also do justice to its more than tolerance of the individual's particular traditional presuppositions. For truth, in our finite minds, comes to its own by exclusion and selection. Our personal thought-systems are at once so divided and so mutually organised that we can only appreciate the deeper significance of obsolete forms of thought in so far as we separate it out and express it in terms shaped by the exigencies of our intersubjectivity. But the content of the mystic intuition, if once admitted to be implicitly intellectual, must be conceived as superior to this limitation. It must comprise the complete truth-equivalent of all errors. And its apparent sanction of some errors and superstitions would be explicable on grounds of its own nature, *i.e.* (1) that it is self-expressive; (2) that it so transcends the content of discursive thought as to be able to utilise, as veridical symbols, a quantity of religious data which philosophy can hardly handle at all; and (3) because of its personal character, can treat as negligible form much that, under the necessities of our common mentality, must be rejected as essential error. All this is quite consistent with the obvious truth that the intuition tends to react upon belief, within certain limits; and also that its relation to historic religion is not settled merely by showing that it is not essentially compromised by its apparent inclusion of particular dogmas that may not win our assent. But those who are most

disinclined to accept the theology of the Christian mystics may yet see, in the catholicity of their central intuition, a mark, not of its emptiness but of its fullness, a liberalism of the Infinite, beyond what the discursive intellect could afford or sustain.

Still, of course, the subconsciousness may serve as a working hypothesis. But, after all, its nature is itself a psychological problem, and though it certainly demands no definition at the outset, we may fairly criticise the transformation it undergoes through the use that is made of it. What is its relation to the personality? And what is the essence of personality? This latter question, surely, must be answered by self-consciousness in its completest form. Now in these mystics it was raised to a level of singular intensity and scope. The suppression of the Ego in the last period was the outcome of a process exactly the opposite of the Hindoo method. The second stage in particular reveals, as the author himself recognises, a fundamental bipartition of the content of the mystic consciousness; and its very essence lies in this: that the Ego, in all the completeness of its functions and depth of its concentration, lies on the dark side of the antithesis. The teleological principle is essentially outside it, over against it. A centre of consciousness as fundamental as we can conceive has formed not merely without including that principle, but by self-definition against it. Can we then maintain that this so-called subconsciousness—subjectively conditioned, of course—is essentially subjective and individual? Such considerations do not seem more philosophical than Psychology is obliged, in the long run, to become, if its terms are to retain a definite meaning.

Still one may accept the author's high estimate of the subconsciousness and of nature, as if it were merely a way of marking the limits of his discussion, though to him it seems to mean something more. And many will welcome it as against the minimising theories of other naturalistic exponents. Nature will find her correlative soon enough if she is not impoverished in her content.

A. R. WHATELY.

VIII.—NEW BOOKS.

The Vitality of Platonism and other Essays. By JAMES ADAM. Cambridge University Press, 1911. Pp. viii, 242.

THE charm which Dr. Adam knew so well how to impart to classical scholarship is deeply stamped on the six essays of which this posthumous volume is composed. For persons who, without being concerned with problems of minute criticism, wish to catch the essential spirit of Greek moral thinking, no better work could be recommended. It is popular throughout in the sense in which only the writing of a deep and original scholar can be popular; it gives us the results of a life-time spent on the study of Plato and the Stoics, especially on the moral and religious side of their work, without a trace of pedantry, and in a style of rare distinction. The first two essays, "The Vitality of Platonism" and "The Divine Origin of the Soul," will form to some of us the most inspiring part of the book. In the first the writer dwells specially on the same theme as he explicitly treats in the second, showing how fundamental the notion that "perfect humanity" is "perfect Godhood" is for Plato's thinking and how vigorously the conception has persisted, notably in Christian thinkers specially influenced by the Johannine ideas, and in such philosophical poetry as that of Wordsworth. Dr. Adam's felicity in illustrating "the greatest of philosophers" by our greatest of modern English poets, in fact almost suggests that it would be well worth while to make a fuller attempt to use Wordsworth systematically as an introduction to the study of Platonism. Of course, no two readers of Plato can be expected to agree about all details of interpretation, and I think I could show grounds for regarding Dr. Adam's view that the God of the *Timæus* is a personification of the "Form of Good," so that the "soul of the world," its Maker, and the model on which he makes it come to be all the same thing, not entirely satisfactory. Indeed, I should deprecate any application of the expression "soul of the world" to Plato's God. To us the phrase at once implies a kind of Pantheism, since our tendency is to think hazily of a soul as "immanent" in its body. For Plato, we must remember, the soul is always "transcendent"; it is a being, as the *Phædo* tells us, of a kind absolutely heterogeneous from and superior to the body which it directs and informs. Hence Plato might on occasion, as he appears to do in the *Philebus*, speak of God as being to the world what our souls are to our bodies without detracting a whit from the "transcendence" which orthodox scholasticism demands for God. However, as Dr. Adam explicitly admits the contrast between the "transcendence" of God in Plato and the "immanence" of God in Stoicism, no serious harm is done.

In the second essay the history of the doctrine that the life of the body is the sleep or death of the soul is traced down from Pindar, where it seems to appear for the first time in what Greek literature we possess, to

Plato and the philosophers. Incidentally it is gratifying to the present writer to find that Dr. Adam is much more willing to attribute the Orphic traits of the Platonic Socrates to the actual son of Sophroniscus than most of our modern writers on these matters. I could wish he had gone just a little farther on what I feel sure is the right line. Thus from the contemptuous way in which dreams are treated in the *Timæus* it seems to me not merely "probable," as Dr. Adam says that the high value put on the commerce of the righteous soul with its God in dreams at the opening of *Republic IX.* is a piece of genuine Socraticism,—and also that Plato personally did not wholly sympathise with his teacher on the point.

The third essay, "The Doctrine of the Logos in Heraclitus," is, in the main, a polemic against Prof. Burnet's contention that the Stoic doctrine of the all-pervading divine λόγος is not to be found in the Ephesian. To some extent the polemic has now lost its point since, in the second edition of his *Early Greek Philosophy*, Prof. Burnet has modified several of the passages criticised. As his account of the matter now stands, a good deal of Adam's argument is obviated by these changes. And altogether I feel that the dispute is largely—if I may venture on so awful a pun—a verbal one. I do not feel sure that there is much material discrepancy between Adam's account of the thought of Heraclitus and Burnet's. As to the mere point of language, Adam has not convinced me that λόγος in the Heraclitean remains ever needs to be rendered by anything but "discourse" or "account," and one of his instances, in particular, seems very unhappy. The remark of Heraclitus about Bias of Priene, οὐ πλέον λόγος ἢ τῶν ἄλλων, seems to me to mean, as Burnet says, "who is of more account than the rest," in spite of Adam's curt remark that it "does not" mean this. How Adam got his own interpretation, "who had more of the universal and eternal Logos in him than the others," out of the words is more than I can conceive.

The fourth essay, on the "Hymn of Cleanthes," deals charmingly with Stoic thought on the universal Fatherhood of God, and offers several interesting suggestions in answer to the question why Christianity rather than Stoicism became the religion of the Roman Empire. I should be inclined, I think, to lay less stress than Dr. Adam does on the lack of a sufficient hope of immortality in Stoicism, and perhaps even on the great advantage possessed by Christianity in being able to assert that its ideal of the divine man who has won the Olympian victory over evil was an accomplished fact. The main defect of Stoicism, I take it, was one which Adam deals with as merely one among its other weaknesses; owing to its "immanence" doctrine, it could not really admit of the "grace of God"; it could enforce the doctrine of human sinfulness, and dwell eloquently on the way in which we have all come short of the Kingdom of God, but it left the convicted sinner alone in the world to work out his own salvation in his own—admittedly non-existent—strength.

Essay V., on "Ancient Views of Suffering and Evil," is an intensely interesting survey of Greek thought on the problem (finally solved, according to Boswell, by Dr. Johnson) πᾶθεν τὰ κακά. I note that it contains the one serious error in principle about Plato which I find in the volume. Dr. Adam follows mistakenly in the steps of Zeller when he makes the Plato of the *Laws* into a Manichee, and credits him with believing in an "evil world-soul" or kind of "devil" co-ordinate with God. What Plato does really say in the famous passage under discussion (*Laws*, 896 D-E), is not that there are two souls of the world, the good and the bad one, but that there must be at least two, the good soul and at least one bad one. He leaves it open to us to suppose that there may be as many

bad and disorderly souls as we please to account for the evil in the world. Thus there is no hint whatever of the *co-ordination* of a good and an evil principle. Plato is, I take it, thinking of the Orphic belief in fallen *daimones*. These would not even necessarily be "devils" in the plural; any lapse from goodness in them would be sufficient to account for their doing mischief. Nor need we suppose them to be hopelessly beyond reclamation. Why a soul should "fall," I admit, Plato does not explain, any more than *our* official theology can explain *why* some of the angels fell; all that he needs is that there should be *now* "evil spirits" to account for the plain fact that creation is not now in all its parts very good. The suggestion of a supreme evil deity co-eval with the good deity is read into his text by the editors, but it is not there for all that.

Finally the book ends with a brilliant defence of classical study as a moral as well as an intellectual training, which should stop the mouth of any belated reviler of "dead" literatures. The two main points are most admirably chosen. The great intellectual value of classical study is that it widens our intellectual sympathies by teaching us to see life through the eyes of men who were so like ourselves in many of their judgments on it, and yet so unlike in others. The very shock of surprise which we feel at the mingled likeness and unlikeness is the wholesome wonder which is the parent of wisdom. And morally classical education is priceless because (this is a Platonic thought which was always a favourite with Adam) we grow like what we contemplate. As we make ourselves at home with the Greeks, we grow into the Greek love of knowledge and of inner measure, order, and self-control; as we learn to see life as the Romans saw it, we acquire in our own souls the Roman's sense of civic duty and reverence for law.

A. E. TAYLOR.

Justice and Happiness. By W. BENETT. Oxford: at the Clarendon Press, 1911. Pp. 140.

Within a very small compass, Mr. Bennett discusses in a highly generalised fashion the concept of Justice in its relation to Happiness. He wishes to ascertain why Justice is valued, for, as he holds, its relation to Happiness is indirect. And he replies that it is because Justice is the condition of Freedom and not because it produces Happiness.

There are two chief theories of Happiness, universalistic and egoistic Hedonism, both of which imply mistaken views of Freedom. In the former it is Communism, which presupposes numerical equality among persons; in the latter Private ownership is made possible by personal inequality. Mr. Bennett is ready to acknowledge the ethical and religious value of the principle of Personal Equality, and also the stimulus to enterprise and achievement in a principle which regards persons unequal in endowment and fortune. But neither is to be identified with Justice because the conditions of true Freedom are wanting. Personal Equality is manifestly based on a mechanical view of character and conduct, while the principle of inequality, unless further qualified, entertains a theory of unconditional Freedom which is not less disastrous to Justice. It must be, then, that Justice is a compromise between these methods which are really its two constituent elements. When either of these, dispersion or accumulation of property, is unduly developed, stagnation, despotism and degeneration ensue. And Justice is what can never be in excess.

What has been said concerns only one of the two main forms of Justice, the Distributive. Retributive Justice occasions no problem,

because the two principles of Equality and Inequality are congruous, as in a school, where it is recognised by the scholars that all should be treated on an equal level but also that each be rewarded strictly according to desert.

Finally, Mr. Bennett holds that the conditions of true Freedom are supplied by "forward evolution," and mistrusts theories, whether as Ethics in the form of Eudaimonism or as Biology in the form of Eugenics, which are unwarranted anticipations of Nature. We do not know if all men are equal nor do we know how far they are unequal; we should not profess to determine the end of Life but trust to the guidance of the Cosmic Spirit.

Animal Intelligence: Experimental Studies. By E. L. THORNDIKE.
New York, The Macmillan Co., 1911. Pp. viii, 297.

In this volume—the third in the Animal Behaviour Series, edited by Prof. R. M. Yerkes—Prof. Thorndike brings together his experimental studies of comparative psychology: "Animal Intelligence" (1898), "The Instinctive Reactions of Young Chicks" (1899), "A Note on the Psychology of Fishes" (1899), and "The Mental Life of the Monkeys" (1901). A theoretical paper on "The Evolution of the Human Intellect" (1901), which was a direct outgrowth of this experimental work, concludes the book. Two new essays are added: an introduction, on the Study of Consciousness and the Study of Behaviour, and a chapter entitled "Laws and Hypotheses for Behaviour". The introduction contains a polemic against introspection, and a plea that psychologists henceforth devote themselves rather to behaviour than to consciousness: "there can be no moral warrant for studying man's nature unless the study will enable us to control his acts".

P. E. WINTER.

The Value and Dignity of Human Life. By CHARLES GRAY SHAW,
Ph.D., Professor of Philosophy, New York University. Boston: at
the Gorham Press, 1911. Pp. 399.

It is refreshing to find that America, the home of Pragmatism among other novelties, is showing a conservative attitude. Here is another book which is decidedly anti-pragmatic. Its watchword is Humanism, but it is not the decapitated Humanism of Mr. Schiller. In Mr. Shaw's view, the head-piece is essential to conduct, cognition being more distinctive of human personality than conation. We should say that Des Cartes was well advised when he wrote *cogito* and not *sentio* or *facio*, for neither of these latter terms would quite justify an immediate inference to existence. We have been reminded that Humanism has a history which goes back as far as Protagoras, but it is not equally creditable. The pretentious self-consciousness of eighteenth-century Rationalism was not the full-blooded Humanism of the Renaissance but the second childhood of the human spirit. The vapid and ineffective character of modern Humanism is only partially concealed by the unlovely and anomalous extravagance of senile decay affecting the manners of boisterous youth. Mr. Shaw seeks to show that there is a higher form of Humanism which we must cultivate if man is to fulfil his true destiny.

As a student of Eucken, he holds up the culture of spiritual life as the most catholic realisation of Humanity. Besides Humanism, he recognises only two other methods, Hedonism and Intuitionism. Of these, the

former sinks man in Nature while the latter abruptly tears him away. Self-assertion and self-renunciation equally fail to justify conduct as reasonable. Sense-affection gives too little, Conscience asks too much. Both may be factors in the progress of Humanity but neither is to be regarded as a permanent norm. It is peculiar to Humanity that it has its essential being in the transition from Nature to Spirit, and it is therefore wrong to assume, with Hedonism, that Man is a piece of Nature, or, with Intuitionism, that he belongs to a Spiritual world which is antagonistic to Nature. The hedonistic method results in the paradox that pleasure never pleases, the rigor of a clear conscience engenders despair. Even in men like Schiller, Kant and Schopenhauer, who also recognised the humanity of man in their æsthetical theories, moralism predominates. In consequence of this, the final good in life is found in a violent denial of the will-to-live or at its best in the resignation of Wagner's Parsifal and the renunciation of Ibsen. Mr. Shaw appreciates the greatness of such men, for in the extreme intensity of their negation they magnify the dignity of human life. But I am not sure if the major morality he commends is not less precious than this heroic Paganism. It is true, as he recognises, that Christianity is more than sacrifice and that "no amount of altruism can atone for want of spiritual insight and purpose" (p. 365). But Christianity has always a place for renunciation, however extreme, and the whole-hearted trust in a Providence whose will we do not know such as this Humanism promises, is not essential to the heroism of faith. To expect that we must always recognise the value of our conduct in order to be good, however disinterested and noble this evolution may be, is a premature anticipation of Heaven upon Earth.

Two minor points in criticism may be noted. It sounds a little odd to say that Green abandoned Reason in his ethical theory. Is it correct to say that moralism predominates in Schiller? It is the case in *Die Künstler*, but this was written before the *Critique of Judgment* appeared; while in *Ideal und das Leben*, the Ideal is completely realised in the æsthetical life alone. As for the *Æsthetical Letters*, it is enough that Goethe admired them while he did not agree with *Anmuth und Würde* because the moralistic view obtruded.

An Introduction to Experimental Psychology. By CHARLES S. MYERS, M.D., Sc.D. Cambridge University Press, 1911. Pp. vi, 156.

This book is one of the series of shilling "Manuals of Science and Literature" now being issued by the Cambridge University Press. It aims at giving to the "educated reader a general scope of the science and of the experimental methods it employs". As was to be expected from the author's name, the aim is admirably fulfilled. The "general reader" will find the book full of interest. And those among them (and they are not a few) who still have a hazy notion that Experimental Psychology is chiefly concerned with some form of spirit-rapping or table-turning, will find enlightenment in an agreeable form. Even the metaphysician who is still sceptical about the possibility of applying experimental methods to mental processes, may not be ill-advised to peruse this little book. The treatment of such topics as Memory and *Æsthetics* will show that Experimental Psychology is not confined by any means to the physiology of the sense organs.

Dr. Myers has been especially happy in resisting the temptation to give a cursory survey of the whole field of Experimental Psychology. He has instead selected several topics and dealt with them with remarkable thoroughness, considering the space at his disposal. The student

of general psychology who is still a novice in experimental work, will find an admirable survey of important recent work, especially in the chapters upon Touch, Colour Vision, Memory, and the Müller-Lyer illusion. The educationist will find congenial reading in the chapters on Memory and Mental Tests, though he must expect less exactness of method and results in the latter comparatively new department. For an illustration of the way in which exact quantitative methods can be applied to psychological questions the reader should turn especially to the chapter on the Müller-Lyer illusion.

The interest of the book is enhanced by frequent allusions to the mental characteristics of primitive races. It is unfortunate perhaps that the hardest chapter in the book is placed first, but the "general reader" who finds that even Dr. Myers' lucid style does not make clear to him the mystery of 'protopathic' and 'epieritic' sensibility, can proceed at once to later chapters without the comprehensibility of these being affected by the omission.

The book concludes with a useful bibliography, but in this the chapters have become somewhat disarranged. The references given under Chapter IV. are obviously intended to refer to Chapter V., and *vice versa*.

C. W. VALENTINE.

Vème Congrès International de Psychologie (Geneva, 2nd-7th August, 1909): *Rapports et Comptes Rendus*. Published by Ed. Claparède. Geneva: Librairie Kündig, 1910. Pp. 877. Price 20 francs. [Continued from the October number.]

(2) *Paul Sollier*. "Le Sentiment cénesthésique" (pp. 197-211). [The essential characteristic of cenesthesia is the personal feeling which is linked to organic sensation. This feeling is not a sensation or a group of these, but is a synthesis of present and past perceptions.] D.—*Benj. Bourdon*. "La Perception de la Position de notre Corps et de nos Membres par Rapport à la Verticale" (pp. 227-246). [Argument and experiment to show that: "Si nous considérons le corps tout entier et si nous le supposons droit, les inclinaisons qu'il subira seront perçues en première ligne par les sensations cutanées de pression qui se produiront aux endroits où le corps sera soutenu, par exemple sous les pieds si le sujet se tient debout librement sur une base qu'on incline". "Dans le cas d'un membre, nous pouvons être renseignés sur sa position de la même manière, c'est à dire par des sensations de pression, de distension de la peau, d'effort." "L'hypothèse d'un 'sens statique' dont l'organe siègerait dans l'oreille et qui nous fournirait, entre autres renseignements, directement la perception de la position de notre tête par rapport à la verticale, et indirectement la connaissance de la position de notre corps tout entier, ne s'appuie sur aucun argument décisif." E.—*Sydney Altrutz*. "Une Méthode d'investigation des Phénomènes psycho-physiologiques" (pp. 247-262). [Experiments with a form of planchette supported on a knife-edge to show that if certain persons of a labile nervous disposition place their fingers on the short, nearer, part of the instrument and make an extreme effort of will, they can thereby increase the weight of the other end of the plank by as much as 100 grams. All possible precautions are guaranteed by the author.] F.—*M. A. Thauzies*. "L'orientation lointaine" (pp. 263-276). [Tries to show that the power of orientation of homing pigeons depends on a magnetic sense, because they never turn to the west; keep close to the ground following the contours, and are much disturbed by electric and magnetic disturbances.] G.—*Les Tropismes*.

(1) *Jacques Loeb*. "Die Bedeutung der Tropismen für die Psychologie" (pp. 281-306). [A statement of his view that the facts of psychology can be submitted to the analysis of physical chemistry. Orientation is automatically regulated by the law of mass effects and by the generally symmetrical build of animals.] (2) *H. S. Jennings*. "Tropisms" (pp. 307-324). ["The tropism is not a uniform phenomenon; the various reactions classified under the concept show diversities in practically every possible category. It is not clear that orientation is really the essential point in the tropism." "The symmetrical position is an incident of the reaction, not its essence."] (3) *Georges Bohn*. "Les tropismes" (pp. 325-337). [Follows Loeb and points out against Jennings that "La sensibilité différentielle est la grande cause perturbatrice des tropismes".] The lengthy discussion (pp. 338-358) of these papers turned on vague general questions (which seem to be excited by utterances of the principals) of the relation between body and soul, between psychological and mechanistic sciences. M. Claparède's words (pp. 345-348) meet the case completely. H.—Classification psycho-pédagogique des arriérés scolaires. (1) *O. Decroly*. "Classification des enfants irréguliers et en particulier des irréguliers scolaires" (pp. 359-393). (2) *Theodor Heller*. "Zur Classification des infantilen Schwachsinn" (pp. 394-398). (3) *G. C. Ferrari*. "Les arriérés scolaires" (pp. 399-402). (4) *M. G. Persigout*. "Du critérium d'une classification d'anormaux" (pp. 403-410). (5) [xxxvi] *M. C. Schuyten*. "Sur la classification intellectuelle des écoliers normaux" (pp. 779-786). J.—*J. Loteyko*. "Introduction à la Méthodologie de la Psychologie pédagogique" (pp. 423-455). Third Part. A.—Terminologie. (1) *Ed. Claparède*. "L'unification et la Fixation de la Terminologie psychologique" (pp. 467-479). (2) *J. Mark Baldwin*. "General Rules of Terminology and Recommendations" (pp. 480 f.). (3) *R. de Saussure*. "Ununiformigo de la Scienca terminaro" (in Esperanto) (pp. 482-487). B.—*Jules Courtier*. "Emploi d'un système de symboles et designes en psychologie" (pp. 500-527). C.—*Otto Lipmann*. "Die Wertung der Resultate von Aussage-experimenten" (pp. 528-534). D.—(1) *W. Nagel*. "Ueber Aichung der Farbenreihe und die Herstellung von Musterfarben" (pp. 535-539). (2) *Th. Valette*. "Note sur une classification générale des Couleurs" (pp. 539-541). (3) *Léon Asher*. "Ueber Farbensaichung" (pp. 542-545). (4) *A. Thiéry*. "Sur la possibilité et l'utilité d'une classification internationale des couleurs par trois coordonnées réellement indépendantes et distinctes" (pp. 545-550). E.—*Vilfredo Pareto*. (1) "Nouvelle méthode d'interpolation pour les phénomènes donnés par l'expérience" (pp. 552-539). (2) *V. Furlan*. "Sur les applications d'une nouvelle méthode d'interpolation" (pp. 559-563). (3) *Charles Henry*. "L'interpolation et l'énergétique psycho-biologique" (pp. 564-570). Communications Individuelles (pp. 591-821).

H. J. W.

Technique de Psychologie Expérimentale. Par le Dr. ED. TOULOUSE et H. PIÉRON. Paris: Doin et fils, 1911. 2 vols. Vol. i., pp. 303; vol. ii., pp. 288. Price 10 francs.

It is six years since the first edition of this work was published. The second edition is in two volumes and is enlarged to about double the size of the first. It bears the names of but two of the original collaborators, Dr. Vaschide having been removed by death. Virtually, in its present form, this is a new work. The points of historical and theoretical interest discussed in the former edition have for the most

part been omitted; the chapters, for example, headed "End and Theory" and "Classification of Psychic Processes" have disappeared. On the other hand, far more space is devoted to an elaborate and detailed description of apparatus, especially in connexion with the psychology of sensation. Chapters have been added dealing with the measurement of certainty in evidence, of suggestibility, of comprehension, of reasoning, of the speed of carrying out an instruction or of inhibiting an action already begun. There is also a new chapter on statistical methods, the calculation of the mean, the mean variation, the probable error, and the correlation coefficient.

In this country such a book is of more value to the advanced than to the elementary student of the subject. He will find pieces of apparatus described and illustrated (*e.g.* Polack's photometer; Michotte's tachistoscope, Toulouse and Piéron's reflexometer) which are almost or quite unknown in our own laboratories. But he will find no mention of the psycho-physical methods, upon a mastery and appreciation of which we believe successful experiment in psychology so materially to depend. Nor will he realise the enormous importance of introspection in experimental psychology. The book will rather leave him under the impression that numerical data, not obtained by any precise method,—merely numerical data,—constitute the goal of the subject. He will be led to believe that the meaning of individual differences in these numerical data may be ascertained not by a study of the introspective records of the subjects, but by the fancied interpretations of the experimenter. The student will thus go far astray.

ANONYMOUS.

Prolegomena zur Naturphilosophie. VON HERMANN GRAF KEYSERLING. München, 1910. J. F. Lehmann's Verlag. Pp. xi, 159.

In the six lectures which form the content of this remarkably fresh and fascinating volume, the writer develops a theory of knowledge based on the Kantian, along the lines of Bergson's theory of Life. His initial postulate is the reality of all phenomena. In view of this the function of critical philosophy is limited to determining the place within phenomenal reality occupied by the process of knowing. The *a priori* principles to which phenomena are subordinate (if the distinction is worth keeping up) are grounded on the knowing subject, not, however, as the unknown ego of appearance, but as the phenomenon man, for whom, as appearance, a place must be found in the whole system of appearances. All priority, especially of a constitutive nature, is thus denied to thought, which becomes merely a given phenomenon; and, as the author says, "Kein Gegebenes ist als solches denknotwendig" (p. 33). We can test the laws of thought, therefore, only in one way—*viz.*, experimentally [the writer identifies the term "experimentell" with the Kantian "transzendental"], and hence, from the cosmic standpoint, the cogency of a logical law is neither more nor less than that of a physical experiment. It is on this very ground that the author bases the correspondence of thought with things. We reach valid or empirically real results not by the capricious application of thought, but by the use of logically permissible generalisations . . . "so folgt [hieraus] mit absoluter Notwendigkeit, dass die Grundnormen des logisch-mathematischen Denkens für alle Naturvorgänge gültig sind" (pp. 42-43).

The interpretation given to the universal validity thus established furnishes the solution to the problem of knowledge, and raises the whole question of law in its acutest form. In the first place, a methodological

analysis results in the discovery that scientific knowledge does not lead to, but away from, the given, and that scientific theories are neither true nor false, but are merely instruments of our knowledge, and, as such, either well or ill adapted to their ends. Hence the idea of scientific truth presupposes the idea of "a knowing or would-be-knowing spirit". "Der Erkenntnistrieb ist also nicht durch die Wissenschaft, sondern umgekehrt die Wissenschaft durch den Erkenntnistrieb zu definieren" (p. 58). But neither can this "impulse to know" be taken as a final presupposition; for it implies a need, which is only a determination of one who needs. We are thus in the last resort confronted with "das Dasein eines lebendigen Menschen," and the conclusion is that "die Erkenntniskritik ist wirklich Biologie" (p. 76).

In the last lecture but one is developed the writer's view as to Life. Although the law-creating thought is admitted to be itself subject to law and the forms of life or Lebenserscheinungen are on the same level as other natural events, Life itself is neither appearance nor law. It is "the sole transcendent reality"—"neither being nor becoming, force nor matter, variety nor unity, neither a function nor a limit, a differential nor an integral" (pp. 118-119). It is something in me which "selber unfassbar, alle Fassbarkeiten bedingt" (p. 119). The principle of Life is thus substituted for the transcendental principles of the Kantian philosophy, which in their turn are reduced to an empirical level.

The value of this transcendental determination of the Life-principle is again critical. On the one hand, it limits the sphere of knowledge as defined by law, at once authenticating and restricting the claims of the latter. Science has to do with only two orders of the real—given appearances, and their laws or relations. Appearances as given we have seen to be assumed from the outset as real. In what sense can the same be said of relations, which are not given, but which are revealed in scientific theory—the instrument of Life? The answer is: there are no laws apart from thought; but as soon as thought supervenes, law becomes unconditionally valid, because nature has the peculiarity of so expressing itself in spirit. In a word, laws are just the mode in which nature appears to thought; only this must be understood in an objective, not in a subjective sense: "der Verstand schreibt der Natur eben nicht seine, sondern ihre Gesetze vor" (p. 97). On the other hand, the theory before us opens the door to Metaphysics—conceived not as a reasoned system of scientific knowledge, or indeed as capable of reasoned statement, and so communicable, but as a direct and mystical "expression of Life," analogous in its immediacy to bodily beauty, art and religious feeling.

One word of criticism must be offered on the presentation of this singularly subtle and attractive theory of knowledge. The writer undoubtedly strains the unity of his view with that of Kant. It is true that where he substitutes Life for other transcendental principles, beneath the transposition there appear in analogies the familiar features of the Critical Philosophy. There is a corresponding demarcation, e.g., against Psychology, against Dogmatism (in the form of Idealistic metaphysics), and against the radical empiricism of Mach and Avenarius. But the writer greatly underestimates the extent of the divergence from Kant which his change in the principles of knowledge brings with it. He does not hesitate to ally with Kant's own position his assertion: "Der Satz: meine Welt ist Vorstellung, durch die Erkenntnisformen gestaltet und bedingt, bedeutet also eine besondere Fassung der allgemeinen Wahrheit, dass die Welt jedes Organismus sein Milieu ist, dessen spezifischer Charakter seinerseits von der spezifischen Organisation des fraglichen Lebewesens abhängt, und aus diesem Grunde nicht das Ansichsein der

Dinge, sondern deren Inbetrachtkommen für dem Organismus zum Ausdruck bringt" (p. 64). Surely the *physiological* interpretation of the *limitations of knowledge* is quite as foreign not only to the letter, but to the spirit of Kant's view as is the physiological interpretation of knowledge itself.

ARCHIBALD A. BOWMAN.

Philosophische Bibliothek, Bd. 67: *Kirchner's Wörterbuch der Philosophischen Grundbegriffe*. 6 Auflage. Dritte Neubearbeitung. Ed. von Dr. CARL MICHAËLIS. Leipzig: Verlag von Felix Meiner, 1911. Pp. viii, 1124.

One of the outstanding characteristics of recent advance in philosophical inquiry has been the great development in what may be called sub-philosophical studies and the cross fertilisation of philosophy from these. The movement towards cosmopolitanism has been scarcely less conspicuous. In regard to lines of approach other than his own to the secret of philosophy none need nowadays feel shame in avowing that he needs a guide-book or directory. He is not necessarily a layman in philosophy who is puzzled with a phrase in which *mutation* means something other than change, or is troubled what to make of an allusive utterance about *entropy* or *heterogony*. Any one but a native-born Teuton may be glad to have a gloss on so recurrent a word as *Einführung*, while of purely technical words, *akatalepsia*, *holomericianist*, and what not, we all remain innocent so long as with decency we may. Such is the justification for a wordbook of a class of which Kirchner's is from its moderate price and workmanlike character a favourable specimen, and the explanation of the necessity under which it is to expand in size and come more and more in contact with the more modern things. Time was when it was best known for the guidance it afforded to the terminology of Kant and the attention it devoted to the technique of formal logic. Under the editing of Dr. Michaëlis it has more than doubled in size, the increase being for the most part in the domain of psychological and biological terminology, and it may now be said to do for Wundt specially, and writers whose interest takes a kindred direction, what earlier editions did so adequately for Kant.

Next in importance, perhaps, to the two sets of articles noted, with which on the whole the book stands or falls, come certain sections, belonging to the older plan, on philosophico- or theologico-ethical subjects. If these sometimes surprise by a quaint collocation such as 'Origen and Schelling on the other hand hold,' and sometimes disappoint by lacunæ, as e.g. in an item on Predeterminism where Schelling is not referred to, they are generally suggestive and adequate. Who could be ungrateful for a luminous note on symbolic anthropomorphism, or for a reminder of the origin of the word dualism in theological controversy?

It is on two points that the editor and his coadjutors are most open to criticism. They attempt to give the purchaser more than his money's worth, with the result that on Political Economy, for instance, there should either be nothing or very much more, while the article on Anthropology is a curious farrago and none of the specific topics belonging to that science, totemism e.g., and magic, can be said to be treated adequately. And their conception of what is required in the matter of bringing up to date the articles where the subject-matter is static and matter of history, but where knowledge is nevertheless in rapid movement, seems to us unsound. Many of the sections on the older philosophy seem to need looking to. 'Plato attached to the universal a separate

existence.' 'Plato and Leibniz conceive reality as a pluralism,' and so forth. The formula by which Herbart and Eleaticism are conjoined seems misleading in the same way. The section on Averroism is surely all but worthless. To write two and a half lines on Predicables and refer only to Kant is odd. And *διχα* does not mean *zweimal*.

Of defects in bringing up to date, the omission of the terminology of Avenarius seems important. Croce has not reached his niche under the heading 'Aesthetics,' though *Ben Crote* (*sic!*) is referred to on page 280. In the article on dreams it is disappointing to have Freud's less important book alone referred to, and his name misspelt beyond recognition. Pragmatism has less than a page given to it, though there is an item on Tuism. In bibliography there is a tendency to appear up to date by the insertion of recent books of relatively no account, with the exclusion of older books of importance. Harth's *Philebus of Plato, e.g.*, is surely of less importance for Plato than many books not on Dr. Michailis' list. It is because the *Wörterbuch* is of a serviceable type and contains much that is useful that it is desirable to offer such criticisms.

HERBERT W. BLUNT.

Bericht über den IV. Kongress für experimentelle Psychologie in Innsbruck. Edited by Prof. Dr. F. SCHUMANN. Leipzig: J. A. Barth, 1911. Pp. xxviii, 312. Price M. 11.

This volume contains four excellent Sammelreferate: (1) "Aufbau und Lokalisation der Bewegungen beim Menschen," by C. v. Monakow (pp. 1-28); (2) "Ueber das Wesen und die Bedeutung der Einführung," by M. Geiger (pp. 29-73), with a bibliography of 161 titles; (3) "Die Funktionen des Vestibularapparates," by Gustav Alexander (pp. 74-94), with a bibliography of fifty-five titles; (4) "Die Ergebnisse der experimentellen Psychopathologie des Gedächtnisses," by Paul Ranschburg (pp. 95-180), with a bibliography of 177 titles. Ranschburg's paper summarises a great deal of work that has not been condensed hitherto, while the paper by Geiger states and arranges all the theories bearing on the empathetic attitude in a most useful manner. All these papers may be heartily recommended to the notice of those interested in the respective subjects.

Of the smaller reports of Vorträge mention may be made of two: "Bemerkungen zur Frage nach der Vererbung erworbener psychischer Eigenschaften," by Sigmund Exner (pp. 203-208); and "Ueber die Bedeutung ethnologischer Untersuchungen für die Psychologie und Aesthetik der Tonkunst," by C. Stumpf and E. v. Hornbostel (pp. 256-269), in which four transcriptions of primitive melodies are given. At the end of the volume there are twenty-eight pages of descriptions and illustrations from the exhibition of apparatus held at the congress (text by Dr. H. Rupp). It may be of interest to students of music to know that a metallophon with the Javanese and Siamese scale, constructed by Prof. C. Stumpf, can be had for 60 marks from Berlin (v., p. 306 and illustration).

H. J. W.

Der Wissensbegriff. Von JULIUS BAUMANN. Heidelberg, 1908.

This is one of a series of 'historical monographs on philosophical concepts,' and gives in the short space of two hundred and thirty pages a summary account of the doctrines of philosophers concerning the nature

of knowledge from Thales to the present day. It would probably be difficult for any one to treat so complicated a subject in so compressed a form very satisfactorily; and a reviewer would find his task of criticism easier if he were already acquainted with the general position of the author. From a quotation on page 226 from a work of his own one gathers that in Prof. Baumann's judgment knowledge consists in the attainment from 'indubitable presentations' (*Vorstellungen*) of certainty of the 'that' of things and of our souls, and partly also of certainty of their 'what' and their proximate conditions, while the true 'how' of their being and activity remains for ever hidden from us. Naturally he surveys the teaching of philosophers in the past from the point of view thus indicated. He is always ready to insist on the 'individuality' of the various doctrines, which will commonly be found to reflect the characteristic personality of their originators. Great importance is attached to climate as a dominant factor in determining the tendency of national thought. Interesting are the remarks on the resemblance of modern doctrines of 'mind-cure' to a certain aspect of Stoicism (p. 96), on the anticipation by Confucius of Kant's postulate-theology (p. 116), on the development from Gassendi to Hume considered as the working out of a reply to 'occasionalism' (p. 166), on the influence of Montaigne upon Kant (p. 187). Kant is no favourite master of Prof. Baumann's; who prefers, as there is no agreement as to the true meaning of his own words, to take Schultz as an authoritative exponent of them. Prof. Baumann seems to underrate the importance of the quantitative to Aristotle (p. 82); and the only works on scholastic philosophy which he commends to his readers are the unsatisfactory ones of M. Le Wulf. The interesting chapter on Arabian philosophy suggests to an outsider that this has been a subject to which Prof. Baumann has devoted especial attention. We have noticed a few misprints; Holosh for Holcot (p. 163 n.); Origines for Origenes (p. 197); and (unless we mistake) Le Rou for Le Roz (p. 219).

C. C. J. WEBB.

Verità e Realtà. Di ALESSANDRO BONUCCI. (Biblioteca di filosofia e pedagogia.) Modena: A. F. Formiggini, 1911. Pp. 518. L.7.50.

The comprehensiveness of the title of this work is not belied by its contents. Sig. Bonucci as an Absolutist has no fear of the reproach of system-making, and he here attempts to give a more or less complete exposition of the system in which he believes. His book is one of very considerable interest, not so much for anything novel in the way of philosophical doctrine it contains, as for the point of view from which it is written, and for the endeavour which the writer makes to bring his metaphysics into touch with life. For Sig. Bonucci is full of the conviction that man's chief end is transmutation into the Absolute, and he has written his book to aid the wayfaring man on his journey towards that goal.

Neither in the base nor in the apex of his metaphysics does our author appear to improve greatly on his predecessors. To the establishment of the fundamental principle of all Idealism—the identity of existence and knowledge—he contributes nothing new, but contents himself with the ancient story, that because you can't know a thing unless you know it, it can't exist unless it is known. In his exposition of what he means by 'the Absolute' he finds himself in serious difficulties. In order to give us a dim notion of its nature—and it is a very dim notion that we get—he has to sin flagrantly against consistency. For after insisting that

only negative judgments are possible about the Absolute, he at once goes on to define it as a kind of experience. It is true he thinks to defend himself from the charge of inconsistency by saying that the term experience is an improper one, and that the definition is no more than "a formula which lets us . . . dimly understand, in the only way possible to us, where the tendency that is all one with us is moving," one that "gives us the only knowledge of the Absolute that is possible for creatures of relativity like ourselves". But surely the only effect of this qualification is to alter the judgment from 'the Absolute is experience' to the unqualifiable and still positive judgment, 'the Absolute in some measure resembles experience'.

Having examined the goal, Sig. Bonucci proceeds to examine in the last part of the book (pp. 249-515) the various paths which lead to this goal, and the various obstacles which impede progress along them. These paths are four in number—*la via estetica, la via morale, la via religiosa, la via scientifica*. What, in effect, we find here is a treatise on ethics and the philosophy of religion. Man's end, according to Sig. Bonucci, is to become one with the Absolute: this end, as is natural, is to be attained by casting off the works of relativity. We are not surprised then that Sig. Bonucci's morals are of an ascetic type, and that he is no great friend of the body. In his attitude to religion he is—perhaps inevitably—rather patronising, and the comparison which he draws between the aspirations of the religious man after saintliness and the philosopher's "proud attempt to be God" might almost give offence to a saint who had no sense of humour.

Sig. Bonucci's style presents constant difficulties to the British reader. Grotesque is probably the epithet which most of those who remember their struggles with *Exploratio Philosophica* will feel inclined to apply to it. Inordinately long sentences abound—the first sentence in the book contains 68 words, the second 142—and the system of punctuation employed is very different from that usual in English books.

W. L. LORIMER.

Opera hactenus inedita Rogeri Baconi. Fasciculus I. Metaphysica Fratris Rogeri Ordinis Fratrum Minorum de Viciis Contractis in Studiis Theologicis. Fragmenta quae supersunt nunc primum edidit Robert Steele. Oxonii, e Typographeo Clarendoniano.

Fasciculus II. liber Primus Communium Naturalium Fratris Rogeri Partes Prima et Secunda, edidit Robert Steele. Oxonii, e Typographeo Clarendoniano.

Fasciculus III. liber Primus Communium Naturalium Fratris Rogeri Partes Tertia et Quarta, edidit Robert Steele. Oxonii, e Typographeo Clarendoniano.

Fratris Rogeri Bacon Compendium Studii Theologiae, edidit H. Rashdall una cum Appendice de operibus Rogeri Bacon edita per A. E. Little. Aberdoniae: Typis Academicis, MCMXI. (vol. No. iii. of the privately issued Publications of the British Society of Franciscan Studies).

The foregoing works will all be welcomed by two classes of students; those who take a keen interest in scholastic philosophy, and are aware how unintelligible the history of modern philosophy is, when it is studied as something new which sprang suddenly to life about the year 1600, or at any rate had its roots entirely in the thought of classical antiquity, and those who are more particularly interested in recovering

the real features of a great Englishman who has, inevitably, been much more talked about than studied. Is it too much to hope that some of the loving care which these publications evince may yet be bestowed not only in making other writings of Bacon accessible (how much there is to be done in this respect may be learned from a perusal of Mr. Little's list of works still extant in manuscript), but also in providing a readable text of those two great later luminaries of the Franciscan Order and the University of Oxford, Scotus and Ockham? The task is, no doubt, a laborious one, but we owe it to the memory of Oxford's great men to do something in reparation for the villainies perpetrated on the Oxford libraries by Thomas Cromwell and his gang.

It is clear that one chief difficulty, perhaps the chief difficulty, of Mr. Steele and Canon Rashdall has lain in deciphering the almost infinitely numerous contractions in the writing they have been called on to expand, and, though it is perhaps an impertinence in a reviewer who knows nothing by personal experience of such work, I cannot but feel that Mr. Steele's sureness of hand increases very much as we pass from the fragments of the *Metaphysica* to the *Communio Naturalia*. Take, e.g., the following sentence from page 5 of the former: *Omnium enim naturam pollicetur que (i.e. quae) paria Deo sentire est*. I can make nothing of this ungrammatical and—in the context—irrelevant phrase, nor can Mr. Steele either, to judge from his note. For once he gives us the unexpanded MS. text, thus: *omnia enī nū pollr [? pollr] q̄paria deo sentire est*—I would modestly suggest that what this means is *omnium enim notitiam polliceri*¹ *comparia Deo sentire est*, an echo of the suggestion of Aristotle that if "divinity could be jealous," we might expect that it would keep σοφία as its own special prerogative. So I find various cases where the editor's division of the words seems to me clearly not what the author meant, and probably not what the scribe wrote. An amusing case occurs on page 35, where Seneca is quoted as saying of "luxury" that *cor ipsum excoquit in vicium malum voluptati dissonantem*. For *in vitium* in the passage (*Quaest. Nat.*, IV. 13) modern editors read *in viciū*, which suggests at once that Bacon merely erred by dividing words wrongly. He probably read *in viciū malum* (sc. *εἰς κακίαν διατταν*), and it would be worth while to examine Mr. Steele's MS. again to see whether it also does not read *viciū*. Of course it must be borne in mind that Mr. Steele does not profess to be editing the MS. critically, but printing it as it stands. Yet when I compare the freedom of his text of the *Communio Naturalia* from gross and obvious errors, such as *talis* for *talīa*, *destruimur* for *destruitur*, and the like, which abound in the *Metaphysica*, I cannot help wondering whether *all* the difference is due to better handwriting on the part of a scribe. In the *Communio* I only note certain errors of punctuation which any intelligent reader can correct for himself, and one or two cases in which the contraction Sörtes (i.e. Socrates, as the "stock" example of a logical subject) is left without expansion. In Dr. Rashdall's work, I have not, I think, discovered anything that looks wrong except a place on p. 50, l. 15, where there is a fairly obvious *ditto*graphia of a clause of four words.

What may be known or conjectured about the place which the works edited by Mr. Steele were intended to hold in Bacon's system will be best learned from his own introductory notes. The *Communio Naturalia* we know was intended to find its home in the Third Part of the great *Scriptum Principale*, which Bacon's troubles with his Superior and with

¹ Or (since Mr. Steele says that the *l's* of *pollr* are due to a later hand) *? profiteri*.

the Pope prevented him from completing, and Mr. Steele shows that there is reason to think that the *Metaphysic* on the faults contracted in the study of Theology was meant to form part of the Second Division of the same work. The *C.N.*, it should be noted, quote, and are thus, as a whole, later than the *Opus Majus*. The so-called "Compendium of Theology," which in its extant portion deals mainly with questions of a logical kind, and more specially with the "import of propositions," gives its own date, 1292, and is thus the latest of its author's many writings. I would specially commend to the reader as of peculiar interest in the *Metaphysica* the full presentment of the very curious argument by which Bacon attempts to prove from astrology that a lawgiver whose law was finally to supersede all others, *must* have been born of a Virgin just at the traditional date of the birth of Our Lord, in the *C.N.*, the long and interesting discussion on the principle of individuation, which ends with a definite pronouncement in favour of the view that matter universal, matter generic, matter specific, matter individual, all have their corresponding "form," and that no created thing is devoid of "matter". Here we have, no doubt, a conscious polemic against the views of St. Thomas, that angels are pure "forms," and that there is in man only one "form," the *anima rationalis*. On Bacon's view there must be in each of us a whole hierarchy of forms, the forms of "elementary matter," of that specific *compositum* which we call our "body," of our individual "vegetative," "animal," and "rational" souls. We have clearly here, as Dr. Rashdall says in speaking of the problem about angels, the germs of the Scotist *haecceitas*. Yet, as he also notes, Bacon's reaction against Conceptualism often takes him to the opposite extreme. Often enough he insists in the fashion of the thorough-going Platonic realism on the *universale* as having matter and form of its own, and then in the next breath tells us that the universal is *only* what is present alike in several individuals. Thus his vacillation between Realism and Nominalism may remind us of the similar contradictions in John Stuart Mill. In the account of the signification of names in the *Compendium Theologiae* we see exactly what a consistent Nominalism ought to lead to. Bacon will not allow that "Socrates alive" and "Socrates dead" can both be equally Socrates. The name was given to denote a certain living human being, and when he ceases to live the ground of the denomination as "Socrates" or even as "a man" is abolished. (This is, of course, merely what Mill ought to have said, to be logical, when he tried to identify classes with collections of actually existing things. The standard of logical accuracy being lower in his day, he smuggles into his class "man," all men who have actually lived or will actually live, and supposes this aggregate to be what is referred to when we make a statement about "all men," as if *e.g.* the statement "Mt. Blanc is a biped" were purely insignificant.) But for a full examination of the very direct bearing of scholastic discussion on our logical problems of to-day I must refer the reader to Dr. Rashdall's own *Introduction*.

A. E. TAYLOR.

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IX.—PHILOSOPHICAL PERIODICALS.

PHILOSOPHICAL REVIEW. Vol. xx., No. 3. **J. B. Baillie.** 'The Moral and Legal Aspects of Labour.' [Labour may be defined as the physical activity of man's body directed upon such physical objects of nature as can be manipulated for man's economic purposes in society. It is neither mere hardship nor mere subordination; it is, on the contrary, man's moral life in one of the forms in which the moral life is lived; it is as much morality as paying debts or telling the truth. Legally, it has rights of property and of contract, determined simply by reference to the well-being of the community, and the share of the individual workman in the common good. It is never an end in itself, as man as a whole is; hence all conceptions of a labour-State must be one-sided.] **B. H. Bode.** 'Realistic Conceptions of Consciousness.' [To interpret consciousness as awareness (McGilvary, Moore, Hobhouse) is to postulate sense-data which give us 'absolute' fact; such a realism is involved in the difficulties raised by the relativity of sense-perception, and is compelled tacitly to substitute a different object, to which it has no legitimate title. To interpret consciousness as a context in which experiences occur (Fullerton) avoids the difficulties of sense-relativity, but otherwise has no advantage over the former theory. To interpret it as meaning (Woodbridge) is to start from the point of achieved adjustment, and so to fail in appreciation of the function which meanings fulfil. To define it in terms of those constructs whereby the psychologist accomplishes the end which he has in view (Dewey) may or may not, as our perspective widens, prove satisfactory: meantime, this definition allows us to evaluate the realistic movement. It may stand as a protest against subjectivism and transcendentalism; it can hardly establish itself as a rival doctrine, since it perpetuates the same fundamental fallacy.] **W. H. Sheldon.** 'Ideals of Philosophic Thought.' [There are two ideals which dominate men's thought: that reality be subject to certain logical rules, and that it is the here-and-now verifiable. Neither can be demonstrated; yet the one or the other must be adopted by every philosopher. Hence in the great problems (rationalism and empiricism, realism and idealism) we find a dead-lock on which argument has no effect: so, *e.g.*, in the present discussion of the nature of relations as external or internal. The only way out would be to show that the ideals, clearly conceived, do not conflict.] **E. Jordan.** 'The Unknowable of Herbert Spencer.' [In the psychological phase of Spencer's argument, the Unknowable as an ontological reality is assured existence by what is found in consciousness. But this residuum is an unqualified datum, raw material of thought accepted without explanation of how it loses its rawness. It is no more an experience than a leaf is a tree; and if not an experience, it has no place in philosophical discussion. The logical phase of the argument seeks to establish the Unknowable as a condition of knowledge, through analysis of the structure of knowledge.]

Negatively, the doctrine of relativity of knowledge appears as an attempt to sift out the unknowable from the knowable by a process of abstract analysis: which is absurd. Positively, Spencer holds that thinking is relating; but he misses the corollary, that knowledge is intelligible only by its interconnectedness.] *Reviews of Books. Notices of New Books. Summaries of Articles. Notes.*

PSYCHOLOGICAL REVIEW. Vol. xviii, No. 1. **F. L. Wells.** 'Some Properties of the Free Association Time.' [Discussion based on some 12,000 observations. (1) *Sex.* The women cover a much wider range, and the central tendency of their times is longer. They fall about equally into two distinct species, the one of which is slightly more constant, the other markedly less so, than the men. (2) *Form of response.* The women give twice as many judgment reactions, and considerably fewer cases of subordination and superordination. The shorter times of the men are expressed in prompter response by superordination, contrast, co-existence, identity, and perhaps by the more superficial predicates. There is a negative relationship between number of contrasts and number of superordinates; the individual with the longer time favours superordination. All the lower forms of association were relatively infrequent. The probable error of an absolutely free time is rarely more than 5 per cent. of the time itself. (3) *Emotion.* Emotive colouring means, on the whole, a longer time; but other factors are of equal lengthening power: this generalisation holds for observers with and without introspective practice. The time of the individual observation is an unreliable index of degree of emotion. Emotion is, in fact, only one form of obstruction; suppression, distraction, indecision, and the like must all be taken into account, compared and weighed.] **E. Jacobson.** 'Experiments on the Inhibition of Sensations.' [The following is a typical procedure: a weight is chosen to give the standard sensation of pressure, and two other weights are so taken that the standard is judged heavier in, say, 30 per cent. and 80 per cent. of the respective judgments of comparison. Now the lighter weights are given in connexion with a loud sound. If, in both instances, the percentage of cases in which the standard is judged heavier is increased, we have to do, not with a mere confusion of judgment, but with an inhibition of the pressure-sensations from the lighter weights by the sounds. The results show that moderately strong sounds are thus inhibited by strong simultaneous pressures, and moderately strong pressures by simultaneous sounds or other pressures. Moreover, increased attention to the inhibitor increases its effect; increased attention to the other sensation reduces the inhibition. Distraction of attention thus consists in the inhibitory influence of sensation upon sensation; and degree of (subjective) intensity of sensation is a function of degree of attention.] **H. Woodrow.** 'The Rôle of Pitch in Rhythm.' [Work by a strictly quantitative method shows that pitch, intensity and duration cannot function vicariously in the production of the perception of rhythm. Intensity has a group-beginning, duration a group-ending effect. Pitch-differences produce practically no rhythm, and the insignificant amounts that are produced show no general tendency whatever; they are, then, probably due simply to variation in the measurements of a quantity whose true value is zero.] *Editorial.* **J. R. Angell.** 'William James.'

BRITISH JOURNAL OF PSYCHOLOGY. Vol. iv., Part i. **Carveth Read.** 'Instinct, Especially in Solitary Wasps.' [General nature of Instinct discussed: possibly referable to tropisms, but even these not entirely

predictable; no hard and fast line between Instinct and compound reflexes. "Impulsive" and "Chain" instincts distinguished. In reference to solitary wasps there is shown, (1) great variability of instincts even among individuals of the same species; (2) the fallibility of their instincts at every stage; (3) memory of definite objects and localities not explicable by mere "sense of direction". There follows an exposition of how complex chain-instincts may develop from simpler actions, assuming principles of natural selection. Preparation of nest for the young traced to making of nest for parents' own use, which in its turn developed from mere modification of natural crannies. The barrenness of females a possible source of sociability in wasps, the "impulse to work" being satisfied in helping others. Concentration upon one kind of food leads to the skill of the specialist and so is advantageous—it may even be accompanied by an anatomical adaptation. Physiological economy may explain cases where prey is only paralysed, not killed. As to intelligence of wasps: (1) memory of locality is remarkable, though possibly flight guided partially by direction of light; (2) sense of quantity shown in size of nest and quantity of food, and in proportioning latter to former; (3) evidence for adaptation of means to end critically discussed.]

A. Winifred Tucker. 'Observations on the Colour Vision of School Children.' [Object—to compare the colour vision of English children with that of primitive peoples. Children from five to ten years of age (a) tested with Holmgren's wools; (b) asked to name colours; (c) tested for thresholds with Lovibond's tintometer. (a) Children of all ages tend to confuse blue and violet; matches with green very varied; red most easily matched. (b) Discrimination may be faulty even in cases where name is correctly applied to saturated colour. There was a tendency "to put together all wools to which the same name was given," as among primitive people; thus blue-greens and green-blues generally called by predominating colour and blue-greens often matched by pure greens. (c) Decrease in thresholds for red, yellow and blue as children get older. No marked difference between boys and girls. Increase of threshold for young children no greater for blue than for red or yellow. Children with dark and light eyes show no appreciable difference in threshold for blue. Indirect vision for blue not as good as direct, as is case with primitive people. Similarity of mistakes made with Holmgren's wools by children and natives ascribed to psychological rather than physiological reasons. No correlation between colour sensitivity and general intelligence.]

Knight Dunlop. 'The Fall-hammer, Chronoscope and Chronograph.' [Criticism of Wundt's Fall-hammer and of Zimmerman's, and suggested changes. In latter, large variation found when timing fall from break to make; "floating lever" too heavy. Reliability of break-spark in chronograph records. Latency of magnetic markers shown by spark method. Many results of work in past with unsuitable markers must be unreliable. In Hipp chronoscope advisable not to reverse current: otherwise occasional forgetting to reverse commutators leads to appreciable error. Magnets should have coarser wire and fewer turns to reduce reluctance and shorten latent periods.] **T. H. Pear.** 'The Experimental Examination of Some Differences between the Major and Minor Chord.' [Kulpe's suggestion that fusion of chord "varies with position of its constituent degrees of fusion within the tonal scale; decreasing when the worse degrees are the lower" and *vice versa*, is put to experimental test and justified, especially in case of most musical observers. A scale of fusion—grades in intervals established for each observer. Average order (of four observers) Octave, Fifth, Fourth, Minor Third, Minor Sixth, Sixth, Third, Major Seventh, Minor Second, Natural Seventh, Major Second. Method demonstrated of calculating consistency of judgments in method of Pair-Comparisons.

Tendency for fusion of chords to be greater when interval having greater frequency-ratio occupies lower position within the chord, and *vice versa*: shown by both musical and "unmusical" subjects. Same true for frequency-difference; this last not attributable to relative proportion of beats. "Indirect" relationship of clangs in a chord conduces to fusion more than "direct" relationship does, especially with more musical observers (and major chord possesses higher degree of "indirect" clang relationship than the minor chord formed from it); hence confirms Meyer's statement that fusion of Dreiklang is higher, the simpler the ratio of its frequencies, "whether the chord be considered as a whole or the tones be taken in pairs". All results apply both to musical and "unmusical" major and minor chords.] **T. H. Pear.** 'The Classification of Observers as Musical and Unmusical.' [Tests used: analysis of intervals, difference-limen for pitch, singing test, criticism of tests as criteria for classification into musical and unmusical. Description of observers in previous research as regards their general attitude to music, auditory imagery, etc. Reasons for not accepting tests as adequate criteria for determining whether an observer is musical or not.] **W. H. Winch.** 'Some Relations between Substance Memory and Productive Imagination in School Children.' [Experiments in four schools. Class of boys tested in substance memory (short stories) and imagination (inventing of short stories), and divided into equal groups on basis of imagination tests. One group then practised in substance memory; this group showed greater improvement in later imagination tests than other groups not so practised. This effect shown in best, medium and weakest boys (as judged by the tests). Class of girls similarly divided into two groups: one practised in memory until no further improvement shown — "fatigue-point": this group showed *deterioration* in later imaginative work, though group unpractised in memory showed improvement in imaginative work, confirming view that overtraining of memory can have prejudicial results in imaginative work. "Fatigue" effects appear to be temporary, but evidence shown that improvement due to practise remains, at least for some weeks. In both schools, marked positive correlations obtained between memory and imagination. Lower coefficients of correlation in other schools with younger and less proficient children.]

Note.—The notices of "The 'Perceptive Problem' in the Aesthetic Appreciation of Simple Colour-Combinations" by E. Bullough; "Experiments on Mental Association in Children" by R. R. Rusk; and "The Transfer of Memory in School-Children" by W. H. Winch, which appeared as reviews of new books in the previous number of *MIND*, were analyses of the articles comprising vol. iii., part iv., of the "British Journal of Psychology."

ARCHIVES DE PSYCHOLOGIE. Tome x., No. 4. **E. Cramaussel.** 'Le sommeil d'un petit enfant.' [At the end of the second week, the curve of breathing is very irregular; physiological functions, like mental, require practice. On the forty-fifth day the curve is markedly more regular, but the respiratory mechanism does not even yet function with entire smoothness. At the end of the third month, the curve is regular. Meanwhile, the sleeping child's response to stimulation has grown increasingly selective; it is possible, then, that we have in such responses a key to the processes of the infant consciousness.] **A. van Gennep.** 'Dessins d'enfant et dessin préhistorique.' [Tests of a five-year-old girl show that drawing from the object (lamp, window, table) is relatively easy, whereas the copying of a linear figure, A or H or M, is immensely difficult. Hence the realism of prehistoric cave-drawings is a sign of rudimentary, not of

achieved technique. There is a tendency to the continuation of rhythmical movement; arrest of movement with abrupt change of direction is difficult; the child's drawings show signs of creative activity.] **M. Foucault.** 'Étude expérimentale sur l'association de ressemblance.' [Review of Peters' work (*Z. f. Ps.*, 1910); report of experiments with two-place numbers and nonsense-syllables. Similarity (partial identity) has associative value only when it is perceived as such by the observer. But this means that it has, in its own right, no associative value; it cannot be compared with contiguity. Similarity derives its efficacy from a judgment, an intellectual act; and in this regard it does not stand alone; the opposition of contrast or incompatibility, the relation of cause and effect or of means to end, will serve the same purpose. On the other hand, repetition is not the sole source of associative connexion; we must add the perseverative tendency of Müller, perhaps a tendency to give meaning to a nonsense-syllable, etc.] **E. Claparède.** 'La question de la "mémoire" affective.' [Review of the status of the controversy; psychological analysis of memory (impression, retention, association, temporal localisation, revival, recognition, disharmony with the present self. The only assured form of affective memory is recognition; the representation of an affective state is not proved, nor even its reproduction (since the elements reproduced are probably organic sensations, and not affections).] **J. Degand.** 'Observations sur un enfant sourd.' [A deaf-mute boy acquires the word and meaning *to-morrow* at seven, *yesterday* five months later, *to-day* still a year later. He comes to a knowledge of his infirmity, when nearly eight, by noting that his teacher replies to a question without looking up. The paper contains further observations, on the development of the idea of time, and on that of language.] Bibliographie. Notes diverses.

REVUE DE PHILOSOPHIE. 1^{er} Mars, 1911. **J. B. Sauze.** 'The School of Würzburg and the Method of Experimental Introspection.' [Külpe and Marbe, Professors of Experimental Psychology at Würzburg. Not mere physiologists. Discovery of "conscious thought, without image, without word, without expression".] **A. Gemelli.** 'The Notion of Species and Evolutionist Theories.' [Mendel and Vries. "Species is a reality, a true biological unity; it may be determined experimentally; it is constituted by individuals descended from one single individual, and having characteristics perfectly distinct, constant and invariable during a long series of generations."] **G. Jeanjean.** 'Critical Review of Pedagogy.' [An up-to-date bibliography.] **P. Le Guichaoua.** 'Responsibility and Sanction.' [Without free will, no real responsibility.] **A. Farges.** 'The Count Domet de Vorges, His Philosophical Work.'—1^{er} Juillet, 1911. **P. Duhem.** 'Time According to the Greek Philosophers.' [According to Archytas, time is 'the number of motion, or the interval proper to the nature of the Universe,' that is to say, the time between two events is the number of revolutions of the Universe accomplished between those two events. Aristotle accepts the definition, 'the number of motion,' and for the motion which is the supreme determinant of time he takes the revolution of the outer crystal sphere containing the fixed stars; which means to us the rotation of the earth on its axis. Strabo objects that time cannot be a number, number being discontinuous, while time is continuous: he makes time 'the quantity contained in actions'.] **J. Toulemonde.** 'The Nervous Temperament.' [Obstinate, yet capricious; prone to excessive care of health and time.] **Dr. R. Van der Elst.** 'The Facts of Lourdes.' ['Ill-observed, the facts of Lourdes may be confounded with morbid or natural phenomena; but,

well observed, they assume a considerable philosophical importance.] **E. Bruneteau.** 'The Natural Law.' [Even under the strange immoral customs of savages one may generally discern principles of sound morality at work, though misapplied.]—1^{re} Août, 1911. **X. Moisant.** 'The Individualism of Carlyle.' [Summed up under these three propositions: '(1) Society is neither the sole nor the principal object of our duties'; '(2) Social authority is not sovereign'; '(3) Social Providence is not the sole true Providence'.] **P. Duhem.** 'Time According to the Greek Philosophers.' [Neo-Platonist theories of time. The theory of Damascius and Simplicius.] **M. Gossard.** 'Concerning Certain Imperfections of Human Knowledge.' [How our intelligence needs to be eked out by imagination; and, consequently, how little we really grasp by such concepts as 'immateriality,' 'intelligence,' 'substance'.] **M. Serol.** 'The Inclinations.' [Human inclinations afford an obvious verification of the Aristotelian theory of act and potency.]

ZEITSCHRIFT FÜR PSYCHOLOGIE. Bd. lvii., Heft 5 und 6. **T. Wagner** und **C. L. Vaughan.** 'Bibliographie der deutschen und ausländischen Literatur des Jahres 1909, über Psychologie, ihre Hilfswissenschaften und Grenzgebiete.' [3132 titles, as against 3067 of the *Psychological Index*, and 4547 of the corresponding list for 1908. The scheme of classification, though slightly more elaborate in places, is practically unchanged.]—Bd. lviii., Heft 1 und 2. **A. Gelb.** 'Theoretisches über "Gestaltqualitäten".' [Detailed criticism of the doctrine of 'form of combination,' as it appears in Ehrenfels, Meinong, etc. The question hinges upon the nature of the conscious relations which obtain between the separate qualities of a perceptive whole. These relations, in the writer's view, are given, precisely as the absolute contents themselves are given; they are perceived, precisely as colours and tones are perceived. The 'form' of a complex, upon this basis, appears simply as a peculiar mode and sum of relations; it has no special phenomenal content. There remains the problem of the forming activity of consciousness; but that is another matter.] **W. Koehler.** 'Akustische Untersuchungen.—II.' [(1) Criticism of Hermann's theory of formants; report of experiments, in which the harmonic overtones of vowel-sounds were suppressed, under varying conditions, by interference. Helmholtz' theory of these sounds must be judged correct; there is no evidence of the Hermann formant, and there is evidence against it. (2) The series of tonal qualities is not a straight line, as has been commonly supposed, but a number of connected lines; the tonal system is therefore like the colour system, except that the lines do not return upon themselves. Experiments with forks and variators show that at about 130 vs. the semi-vowel *m* is heard; above this point, the tone takes on a *u*-character, till at the octave (260) the *u* sounds full and pure; then the *o*-character begins, and the *o* is pure at the next octave; then follow, in order, *a*, *e*, *i*; and after the *i* come, apparently, *s* and the anterior *ch* (as in *lächeln*): what is heard below the *m* has not been determined. The experiments are reported in full, and the writer notes various scientific anticipations and external confirmations of his discovery.] Besprechung. [Hillebrand on Titchener, *Feeling and Attention*.] Literaturbericht.

ARCHIV F. D. GESAMTE PSYCHOLOGIE. Bd. xviii., Heft 2. **C. Ernst.** 'Tierpsychologische Beobachtungen und Experimente.' [Begins with a well-considered critical warning against the admission of anecdotal material into comparative psychology. Then details experimental studies of the path-finding powers of the red ant (*F. rufa*). Much in the

behaviour of ants that looks like intelligence is mechanically acquired and may be mechanically explained; there is, however, evidence of learning; and there is evidence of guidance by sight. The work was undertaken in order to try the issue between Wasmann and Bethé, and the writer apparently finds truth on both sides; while he emphasises mechanism, he speaks also of memory-image and act of recognition. He makes, however, no attempt at an ant psychology.] **T. J. de Boer.** 'Ueber umkehrbare Zeichnungen.' [In order to test the Wundtian theory of fixation and eye-movement, a number of perspective figures was briefly exposed, and the observer was requested in every case to indicate the point, line or surface that was seen as nearer or farther than the rest of the figure. With simple and non-associative figures there is often a fixation of some central point or part; but the subsequent perception of depth is probably due, not to the fixation, but to a habitual mode of the production of ideas; and, as the figures are given a closer resemblance to actual objects, the influence of associative factors may be plainly traced. There are individual differences.] **A. Huther.** 'Ueber das Problem einer psychologischen und pädagogischen Theorie der intellektuellen Begabung.' [Beginning with a critical discussion of Wundt's doctrine of talent, the writer reaches the conclusion that an analytical description of mental endowment must always start out from the concrete case, a determinate circle of professional ideas and a particular talent dependent upon these ideas and exemplified in them. He takes up the case of mathematical, especially of geometrical ability, and attempts a classification of qualitative types. What is inherited is not ability, but only certain formal factors, functions, which may be utilised in training; here the author differs from Möbius. There can be no formal training of intellect or feeling, but only of will.] **O. Rutz.** 'Neue Ausdrucksmittel des Seelischen.' [The lecturer's father, J. Rutz, discovered that certain singers, of good training and of adequate vocal range, found it difficult to render certain compositions. The cause lies in the fact that singing and the reading of poetry demand, unconsciously on the part of composer and poet, a peculiar colouring of the voice. Three great types may be distinguished: the Italian, dull and soft voice; the French, bright and hard; and the German, bright and soft; the combination dull and hard has not been found. The difference of vocal colouring depends upon bodily attitude, 'resonance of the trunk'; rules of posture are laid down, and subtypes distinguished, with illustrations from well-known sources; and the writer remarks that most singers lean naturally toward a particular type, and cannot transcend it. An Appendix gives the favourable judgment upon the discovery of Sievers, Wundt, and others; the various types and sub-types may be verified by laryngograph and pneumograph.] **R. Mueller-Freienfels.** 'Affekte und Triebe im künstlerischen Geniessen.' [Emotions may be classed as emotions of mood and emotions of impulse. In the enjoyment of art, the observer may experience the emotions of actor (*Mitspieler*) or of spectator, though the extreme types are rare; and, as actor, may be stirred sympathetically (*Mitaffekt*) or personally (*Eigenaffekt*). It is, then, absurd to suppose that æsthetic enjoyment is 'disinterested' in the sense that it is always emotion of mood; emotion of impulse may be æsthetic, though it is in that case modified and limited, since all motor functions are inhibited by the æsthetic predisposition. The point thus made is clinched by a brief survey of emotions which do, in fact, find application in the domain of art.] Literaturbericht. Einzelbesprechungen. [Meumann on Volkmann, *Grenzen der Künste, auch eine Stillehre*, and Waetzold, *Die Kunst des Porträts*.] Referate.—Bd. xviii., Heft 3 und 4. **F. Kiesow.** 'Beobachtungen über die Reaktionszeiten der schmerzhaften Stichemp-

findung, nebst einigen Vorbemerkungen über die Entwicklung unserer Kenntnis von den Schmerzempfindungen seit J. Müller und E. H. Weber.' [Reviews the psychological status of pain from the time of Johannes Müller to the present day; concludes that pain is a specific sensation, whose end-organ is independent of that of touch. Reports reaction-experiments (natural, sensory, muscular, indifferent) with stimulation of pain-spots upon forearm and lower lip. The times are unexpectedly short; thus, the sensory and muscular times for the forearm average 215 σ and 140 σ respectively.] **G. Moskiewicz.** 'Zur Psychologie des Denkens; erste Abhandlung.' [Seeks to trace, analytically, the process of reflective thought, and to discover the principles on which ideas connect with one another when their connexion results in meaning. The motive to thought is the refusal of the associative mechanism to meet a demand; the end of thought is a tendency, brought to consciousness by this inhibition, for a train of ideas to take a definite direction, in order to arrive at a definite connexion. The writer starts out from the notions of 'constellation' and of 'superior ideas'. The constellation is brought into relation with the 'problem' and the 'determining tendency' of other authors; its essential feature is the arousal of an idea by a multiplicity of reproductive tendencies; it lies within the limits of an associationist psychology. The chief characteristic of an ordered course of thought is that an idea (or complex of ideas) is held fast by the attention, so that it can develop its own 'constellating' activity and can inhibit the constellating effect of other ideas. Ideas that satisfy one and the same 'problem' or 'point of view' unite to form general ideas, Liepmann's 'superior ideas,' which may appear in consciousness as explicit contents, or in a merely potential or schematic way. Armed with these concepts, the writer takes up, first, the topic of simple inference (e.g., the argument from a phenomenon to its cause); the regular procedure is that a superior idea unfolds in particular ideas, until some of these enter the relation demanded by the problem; the process begins with synthesis, and passes through analysis to a new synthesis; the progress of thought depends, however, essentially, upon the interplay of the purely associative mechanism. He then turns to the thought that 'puts things together' (diagnosis of a disease; Sherlock Holmes) and asks how the particular ideas give rise to a superior idea, and how the particular ideas themselves appear in consciousness. The superior idea is again a matter of constellation; in the progress of thought, processes of inference are started by the unfolding of this idea. But the superior idea works with constellating effect upon all the ideas that are connected with the original particular ideas, and is thus either confirmed or invalidated; in the latter case the whole process is repeated, until reflexion has attained its end.] **F. M. Urban.** 'Ein Beitrag zur Kenntnis der psychometrischen Funktionen in Gebiete der Schallempfindungen.' [Uses Keller's results in illustration of the writer's view of the psychometric functions.] **O. Schauer.** 'Ueber das Wesen der Komik.' [Maintains, on the basis of critical discussion and of instances, that all cases of the comic involve a sort of teasing (Neckerei). Polemic against Freud's work.] Literaturbericht. **M. Kelchner.** 'Sammelbericht über den gegenwärtigen Stand der Erörterung einiger Grundprobleme der Gefühlspsychologie.' Einzelbesprechungen. [Kemp on Stumpf, *Beobachtungen über Kombinations-töne*; Wentscher on Ach, *Ueber den Willensakt und das Temperament*; Rieffert on Jaensch, *Zur Analyse der Gesichtswahrnehmungen*.] Referate. —Bd. xix., Heft 3 und 4. **O. Lipp.** 'Ueber die Unterschiedsempfindlichkeit im Schfelde unter dem Einflusse der Aufmerksamkeit.' [Repetition with some modification of procedure, of Wirth's work, published in *Psychol. Studien*, ii.; Wirth had been his own sole observer. Wirth's

main conclusion, that the differences of clearness in the field of vision are relatively small, is confirmed. If the region under observation extends to the periphery (whole field, half, quadrant), it is found that the preference of attention is towards the periphery; if the region is central, the preference is towards the centre. The smaller and the more naturally situated a field of observation, the more easily is it commanded. These results are qualitative only; their quantitative expression, in terms of the absolute values of the limens, is still impossible. Distribution of attention is not analogous to diffusion of light; *i.e.*, we do not now apprehend, all together and dimly, a number of objects which with concentration we should apprehend separately and clearly; distribution of attention implies a shift of mental attitude, with a corresponding change of object.] **T. Conrad.** 'Sprachphilosophische Untersuchungen: erster Teil.' [An inquiry into the properties and functions of words, considered as the intelligible units of speech. (1) The author begins by distinguishing two groups of object-words or denominative words: names, and not-names. The names are either individual or singular (John) or common or general (Smith); and the not-names show the same class-division (sun, God; table, chair). The relation of the singular name to its object is the specific relation of being-so-called; the general name bears the same relation to a given and determinate group of objects (members of the family of Smiths). The various modes of this relation are worked out; and it is shown that, in principle, the same classification holds for the not-names. (2) All these words are, as units of a vocabulary, denominative, in the sense that they are marks or labels of objects. When they become units of discourse, they may be denominative in a more pregnant way; they assume the function of designation or representation. Thus, in the phrase 'John was there,' there is designation of an individual, besides the intrinsic denomination carried by the name-word; and the word 'John,' in the phrase 'John is his name,' is not only intrinsically denominative, but also represents an absolute name-word 'John,' which, as such, is not in the phrase. (3) As used in discourse, the general denominatives which are not-names may, further, characterise (*kennzeichnen* as opposed to *bezeichnen*). This function gives us the relation which the words, as units, bear to their objects: they do not name a given and determinate group, but denominate an indeterminate group that is constituted by objective likeness of character or quality; they are thus finally differentiated from the corresponding class of general names. When the function is discharged in discourse, in the phrase, it may appear in either of two principal forms: as direct or as indirect characterisation. A further paper is to deal with the modes of indirect characterisation, and especially with tropes.] **F. Schwiete.** 'Ueber die psychische Repräsentation der Begriffe.' [A study of thought which sets out, not from the judgment, but from the concept, and seeks to determine the mode of representation in consciousness of the meaning of words. Five sets of experiments were made, with varying instruction: free associations, constrained associations, apprehension of meaning with and without a time-limit, reaction to tachistoscopic exposures. (1) The first apprehension of a concept consists in the moment of familiarity, and the consciousness that its exact meaning can be drawn from the subconsciousness. Familiarity is carried by an image of the word itself, or a nascent visual idea, or an obscure logical connexion, or a general group of related ideas, or a feeling. (2) Explicit meaning is carried, individually, by imaginal contents, or by inclusion of the term in some logical connexion or some group of related ideas, or by a procedure of definition, or by some or all of these processes in combination. The processes themselves are described in detail.] **J. Geyser.** 'Einige Bemerkungen

zu dem Aufsatz von Georg Moskiewicz "Zur Psychologie des Denkens". [The psychology of thought requires, first of all, an exact analysis of the cognition of relation; and this analysis cannot be carried out without exact, and if possible experimental, introspection.] **A. Thierfelder.** 'Eine Sinnestäuschung.' [A turning wheel alters its apparent direction of rotation, in accordance with Wundt's rule, according as the nearer or farther edge is fixated.] IV. internat. Kongress für Philosophie in Bologna, März-April, 1911. Literaturbericht. **E. Zschimmer.** 'Berichtigung.' **O. Braun.** 'Entgegnung.' [Apropos of a review of Zschimmer's *Welterlebnis*, i.]

ZEITSCHRIFT FÜR PHILOSOPHIE UND PHILOSOPHISCHE KRITIK. Bd. cxlii., Heft 1. **Otto Kröger.** 'Die Realität der Aussenwelt im Lichte des absoluten Idealismus.' **Hermann Hegenwald.** 'Über das Wesen und den Begriff des Geisteslebens in Rudolf Euckens Lebensphilosophie.' **August Messer.** 'Der Erkenntniss theoretische Idealismus in seinem Verhältnis zum Empirismus und Realismus.' **Arnold Ruge.** 'Der vierte internationale Kongress für Philosophie zu Bologna (6 bis, 11 April, 1911).' Rezensionen, etc.—Bd. cxlii., Heft 2. **H. Aschenasy.** 'Grundlinien zu einer Phänomenologie der Mystik.' Rezensionen, etc.—Bd. cxlii., Heft 1. **Alfred Wenzel.** 'Ein neues Spinozabuch.' **Herman Hegenwald.** 'Weltbegriff und Weltanschauung in der Philosophie Johannes Rehmkes.' **Otto Braun.** 'Das Ringen um eine Weltanschauung.' Rezensionen, etc.—Bd. cxlii., Heft 2. **Leo Ssalagoff.** 'Vom Begriff des Geltens in der modernen Logik.' **Kristian B. R. Aars.** 'Die intellektuelle Anschauung im System Platons.' Notizen, etc.

RIVISTA DI FILOSOFIA. Anno iii., Fasc. 2, April, 1911. [This number is entirely occupied by papers read before the International Congress of Philosophy, held at Bologna in the spring of this year.] **B. Varisco.** 'Sul concetto di verità.' [Truth of fact or contingent truth implies the existence of necessary truth, which again must have its seat either as an indeterminate reality dispersed among a number of human consciousnesses, or as a realised determinate whole in a single extra-human subject. The second or Theistic solution seems far the more eligible to Prof. Varisco.] **Alessandro Levi.** 'Ordine giuridico e ordine pubblico.' [A rather bewildering paper, the upshot of which seems to be that where there is a conflict the guarantees of private liberty should give way to the guarantees of public order, and the claims of international law to the claims of territorial sovereignty.] **Roberto Assagioli.** 'Il subcosciente.' [The writer considers that the existence of what he prefers to call 'conconscious' mental states has been scientifically established, and proposes that these should be more systematically studied with a view to their habitual utilisation for educational and reformatory purposes.] **Luigi Valli.** 'La valutazione.' [What we call values are not qualities or properties inherent in certain objects or actions, but feelings of attraction or repulsion generated in ourselves by their contemplation. Only to constitute real values these feelings must not be merely momentary or personal. They must be comparatively permanent and universal. And in the case of ethical values what makes a motive truly moral is that it should act with the cumulative force of such a permanent and universal attraction or repulsion.] **Carlo Formichi.** 'È il Buddhismo una religione o una filosofia?' [Buddhism, being an ethical system of atheistic pessimism, is not in our sense of the word a religion, and this is no less true of the Northern than of the Southern or Singhalese version of its

creed.] **Alessandro Chiapelli.** 'Il pluralismo moderno e il monismo.' [The recent revival of pluralism in philosophy forms part of the general reaction against rationalism exhibited in other forms by pragmatism, voluntarism, and the intuitionism of Bergson. But pluralism, to begin with, is the negation of the principle of continuity so strongly affirmed in Bergson's philosophy; and to end with it is the negation of all philosophy by making explanation itself impossible. For explanation means the reduction of the many to the one.] **Giuseppe Tarozzi.** 'Il contenuto morale della libertà nel nostro tempo.' [The idea of liberty in contemporary thought is recovering the meaning of a positive and progressive energy which it represented in the teaching of Rousseau, Mazzini, and others in the pre-constitutional period. It is no longer identified with the mere removal of political or commercial restraints, nor yet with the anti-social individualism of J. S. Mill, but with equality, fraternity, and the growth of universal humanity.] **Giovanni Vidari.** 'I concetti di fine e di norma in Etica.' [The end of action means that object towards which the will is directed and in the attainment of which rests satisfied. But such a notion involves, to begin with, the logical contradiction that the will seeks for its own annihilation. Further, self-satisfaction means pleasure, or happiness in the sense of permanent satisfaction. And this cannot be the moral end, the end of the will as such, seeing that pleasure and happiness differ from one individual to another. By parity of reasoning it is shown that neither can there be any universal rule for the will, the conception becomes self-contradictory when analysed. Prof. Vidari concludes that there are neither absolute ends nor binding rules in morality, but that there is a moral *law*, which is the affirmation of the will by itself, the self-realisation of its essence. And the study of those ends and rules of conduct which are observed to prevail in experience will be found helpful towards ascertaining what this is.] **F. C. S. Schiller.** 'L'Errore.' [An Italian translation of Dr. Schiller's contribution to the proceedings of the Congress.] **Francesco Filomusi Guelfi.** 'Della Filosofia del diritto in Italia dalla fine del secolo xviii. alla fine del secolo xix.' [A lengthy historical summary not admitting of further abridgement.]

X.—NOTES.

NOTES ON A CRITICISM.

IS reference to the critical notice that appeared in your last issue of Dr. Ross's and my own edition of *The Philosophical Works of Descartes* now being published, I should like to make a few remarks. Dr. Ross is at present in Burmah and I have not had the advantage of discussing the matter with him, but I feel sure that he would agree with me in appreciating some of the criticism which is there made upon our book. Many of the points made by Prof. Taylor are valid, and he has detected certain errors which, when there is an opportunity, will be corrected. At the same time I cannot but think that in a considerable number of cases the criticism is not justified.

First of all we are severely taken to task for the scope of our book. We are told that amongst *The Philosophical Works of Descartes* we should have included the *Geometry*, the *Dioptric* and *Meteors* and a complete version of the *Principles*. The omission of the *Geometry* in particular is said to be a "capital fault," while the other Essays formed in Descartes' eyes an integral part of his *Philosophia*. Now I venture to point out that had these Essays been included it would have been absolutely essential that we should also have included practically the whole of Descartes' works and made no distinction between the philosophical and the scientific portions of these works. If we had included all that has value as bearing on what we may call philosophy in its application to the sciences, we should most undoubtedly have had to include the physiological treatises. Prof. Taylor talks of the *Geometry* as being "epoch making". But the *De l'homme* or *De homine*, to take an example, was certainly epoch making also, and perhaps even more so than the mathematical books. Certainly modern physiologists will be unanimous in telling us that this is so. And thus, had we followed Prof. Taylor's suggestion, the edition would have extended to many volumes instead of two, and the term "philosophical" would have ceased to indicate any limitation whatever. I cannot think that this is what the public would have understood by the name. They would have had reasonable ground of complaint, if, under the limiting title of *Philosophical Works*, we had included those writings of Descartes which are now commonly described as scientific in distinction from philosophical.

Then I am taken to task for using the French version unduly in the case of the *Meditations* and *Principles*. Now I hardly think Prof. Taylor can have remembered what Descartes himself said to Clerksel on this subject, as recorded by Baillet (*La Vie de Descartes* (1691), vol. ii., p. 172): "Sous prétexte de revoir ces versions, il se donna la liberté de se corriger lui-même, et d'éclaircir ses propres pensées. De sorte qu'ayant trouvé quelques endroits où il croyoit n'avoir pas rendu

son sens assez clair dans le Latin pour toutes sortes de personnes, il entreprit de les éclaircir dans la traduction par quelques petits changemens, qu'il est aisé de reconnoître à ceux qui confèrent le François avec le Latin." Baillet sums the matter up thus: "Cet éclaircissement touchant la traduction des Méditations et des Objections est nécessaire non seulement pour justifier les traducteurs sur les changemens dont l'auteur est le seul responsable, mais pour faire voir aussi que la traduction Française vaut beaucoup mieux que l'original Latin, parceque M. Descartes s'est servi de l'occasion de la revoir pour retoucher son original en notre langue. C'est un avantage qu'a eû aussi dans la suite la version Française des Principes de M. Descartes fait par l'abbé Picot." As explained in the Preface to the *Méditations* the author's revision renders the French version specially valuable; it would have been unsafe to disregard even its minor changes: although only the more important variations have had attention specially drawn to them in the notes.

I may now be allowed to notice some individual points in regard to which the criticism seems a little harsh. Of course one knows the extraordinary difficulty there is in making a fair translation of any book and especially of adhering in any consistent way to certain equivalents of given words. I have myself read what might be called classic translations along with the originals and seen how far short they fall from consistency in this respect and how easy it would be to criticise them by applying literal methods of criticism. But in the following examples is there not a suspicion of hyper-criticism or is it merely a translator's hyper-sensitivity?

In the *Meditations*, page 170, I am charged with translating "*nisi simul effecerit ut quoniam ille essent cognoscerem*" "without having caused me in some measure to know what they are". (May I point out that I am not quite correctly quoted, for "at the same time" is omitted?) I have thus, I am told, interpolated in "some measure". These words, however, are taken from the French version approved by Descartes—"sans avoir fait en sorte en même temps que je sceusse ce qu'elles estoient".

At page 198 I have said "drinking is essential for the health of the body" whilst I should have said "conducive to" (*quod ad corporis valetudinem potus conducatur*), since health is not a *substantia* and therefore has no *essentia*. Now I cannot conceive that any reader would for a moment take this "essential for" as implying that drinking is an *essentia* and health a *substantia*.

In page 378 I have translated "*breuvage*" by "*concoction*" ("We see in the case of those who have in illness taken some concoction with great aversion")—a rendering condemned as "*vulgar*" as well as inaccurate. "*Breuvage d'amour*," as we know, means "*love potion*"; but most of us think of the beverage in the light of a concoction rather than a potion when taken under the circumstances described by the author. Another "*vulgarism*" of which I am held guilty is that of "*outside of the mind*" (for *extra mentem*); and here I must shelter myself under the authority of R. L. Stevenson and other well-known writers who commit the same vulgarism.

Page 403: "they never give so much advantage to their enemies as to recognise that they are harmed by them". *Offensé* should, Prof. Taylor says, be translated "insulted" or "affronted," not "harmed". Perhaps "hurt" might be best of all, but "harmed" is not very far from the mark, as "injurer" or "blesser" is usually given as its equivalent.

Page 409: "a miser desires never to be away from his treasure in case he is robbed of it". This it appears should be "for fear he may be robbed of it" (*de peur qu'il lui soit dérobé*). Is this not carrying criticism to an extraordinary point?

Page 415, I am called to account for translating "*sang meurtri*" as "battered blood" instead of "livid blood". Here I cannot agree with my critic for "livid" is used below, and why, if "livid" were meant should the same word not have been used in this place also? In the other case Descartes describes the colour of the slow-flowing blood in the veins; while the "mingled yellow and black like *sang meurtri*" seems to me to bear a more ominous portent. The dictionary rendering of *meurtri* is "bruised with blows," "covered with wounds," and no suggestion of "livid" is given or, I think, implied; and "batter," according to Webster, is "to beat with successive blows" . . . "to beat repeatedly so as to bruise". Thus it would seem that I have got pretty near the true meaning of the word.

I have, it appears, dubbed Regius "Physician" instead of "Doctor" as in the Latin. "Doctor" would have been more correct, no doubt; but seeing that a special Professorship of Medicine was with much difficulty established solely for Regius' benefit, one associates him above all with the subject he taught, and the profession with which he will always be identified.

Again (p. 449) "*componere*" in correct Latin distinctly means to "compile" as in the phrase "*Liber ex alienis auctoribus compositus*". To put together one's own writings, and so "compile" a book of them is by no means impossible.

I should have known, I am told, that the Lateran Council and not Leo X. "enjoined the philosophers". If Prof. Taylor will consult the official records of the Council he will find that the act "enjoining" the philosophers was published in the name and by the authority of Leo. To that act were added these words: "*Datum Romæ in publica sessione in Lateranensi sacrosancta basilica solemniter celebrata anno Incarnationis dominicæ MDXIII. XIII. Kal. januarii pontificatus nostri anno I.*"

In conclusion, I must express indebtedness to Prof. Taylor for pointing out three awkward misprints. As I have noticed the same number of misprints or clerical errors in his review, he will sympathise with my annoyance that they should have escaped my own eye in revising the proofs.

I have not dealt with any points connected with what is more especially Dr. Ross's work as I hope he may be able to make his own reply.

ELIZABETH S. HALDANE.

RANGOON COLLEGE, BURMA.
13th November, 1911.

TO THE EDITOR OF MIND.

DEAR SIR,

I have asked my collaborator to forward to you the following replies to the criticisms made by Mr. A. E. Taylor in *MIND*, N.S., No. 80, on that part of *The Philosophical Works of Descartes*, vol. i., for which I am chiefly responsible. The strictures our critic has made on the general scope of our work do not effect either of the translators, as they did not select the treatises to be included in this publication. But the Cambridge University Press is not likely to heed the reproach of not having included Descartes' physical among his philosophical works. That in a desire for the translation of other works not strictly philosophical the present translators concur, any one will see who reads the preface to vol. i.

I do not complain of Mr. Taylor's truculent manner, except in so far as it leads him to magnify the extent of the blemishes he has found and to

put the worst interpretation on every slip of the pen or error in proof-reading. I have more reason to object to his want of candour. Thus when (p. 543) complaining that the reader must consult the Latin or French to discover whether "simple" means *simplex* or *facilis*, whether "intellect" means *ingenium* or *mens* or *intellectus*, he omits to mention that it is stated in a note on page 5 that the word corresponding to 'simple' is on this occasion *facilis*. He conceals the fact that it is again and again pointed out when *ingenium* is the word translated. Similarly the use of *naturas* is pointed out on page 16. So, in many other cases, the translators have indicated the Latin or French word translated, doing so, since there was not to be a fully annotated edition, only when they thought the reader might otherwise be misled.

Similarly also I used my discretion about including and omitting notes on the text of the Adam et Tannery edition. Mr. Taylor's method of criticism is to censure every omission and keep silent in every other case.

It is true that I have to apologise to the reader for three misprints *readily* for *rashly* on page 14, last line; *connected* instead of *converted* on page 43, and *not* instead of *not precisely*, page 61, paragraph 2. That my critic should take these as errors of a more serious nature, is a reflexion either on his candour or on his acumen. An exacting critic should take care that his own use of terms is quite accurate. But in alleging that my translation on page 3 (Mr. Taylor says page 2) involves a breach of the Law of Contradiction, he confuses opposite with contradictory, and seems to forget that contrary opposites may both be false.

I shall pass by the occasions on which Mr. Taylor accuses me of using 'verbiage' and 'slang'. The reader can judge and also estimate the correctness of the view which Mr. Taylor takes of his function as a critic in thrusting matters of such minute importance into the forefront.

There are matters of more moment in which I should be glad to have advice, not believing in my own infallibility nearly so strongly as my critic in his. For example, the translation of *aqualis* and *aequalitas* caused me much thought; I preferred to use the word *uniformity* rather than the technical *equation* as I was translating a work dating from a time before the consolidation of technical usage. But at least I have throughout made the reader aware of what I was doing by means of notes, a fact which my critic once more suppresses. Similarly my rendering on page 30 is not a 'pure mistranslation,' but an attempt to express the passage so as to fit in with the context of Descartes' thought.

Once more I dissent from Mr. Taylor's opinion that *componere* in the statement of rule xii (p. 35) means to *conjoin*, *complicate*. Descartes' treatment of the rule further on (p. 40) bears out my translation.

But readers have doubtless by this time formed their own opinion about the value of Mr. Taylor's criticisms.

Yours truly,
G. R. T. Ross.

A REPLY TO A CRITICISM.

I CANNOT but feel honoured by the space which is given in the last number of MIND to a criticism of my views. And I should like to be permitted to offer some remarks on this criticism. I find myself however here in a difficult position. So far as my own views have been misapprehended, I could hardly make this clear otherwise than by an attempt to re-state them throughout. And again so far as Mr. Strange argues from a position which I reject, I should not feel myself justified

in dealing with that position as it is left in his article. All that I can do, therefore, is to attempt to indicate briefly a series of apparent misconceptions with regard to the doctrines which I hold.

(1) Mr. Strange apparently takes me to identify feeling with reality. Everything, I understand him to say, arises out of feeling and returns into it. This of course is to me a fundamental mistake for which I am in no way responsible. The mistake runs through and vitiates a large part of Mr. Strange's criticism. It is another side of the same error when I am told that for me feeling is indisputable and beyond criticism. I am unable to do more here than once more to express my surprise.

(2) I am further taken to limit the actual to a series of momentary and fleeting psychical events. I cannot think that my critic has the least idea of what to me is the position of events in time, or again of psychical existence and mental facts of the moment, and of how all this to me depends on ideal construction from the basis of immediate experience. He evidently takes mental facts as being for me something which in their own shape are ultimately real (p. 488). The only answer which I can make here is a general reference to what I have written on the subject. Again (p. 482) I am offered a dilemma on the ground that I deny "that the soul is existent". I however thought that what I held was that the soul is existent, and that its existence involves inconsistency. How could I possibly deny the existence of the soul?

(3) The assertion that I identify feeling with "the self or individual" (pp. 464-465) once more causes me surprise and prepares me for anything or everything in the way of a conclusion. But I pass from this to notice the argument (pp. 465-466) that, if my doctrine as to feeling were true, I at least could not know this. Mr. Strange is apparently unaware that I have myself raised this objection and tried to deal with it (*Appearance*, pp. 93, 110, and *MIND*, No. 69). What I have written here may be worthless, but how can my critic claim a right to treat it as having no existence?

(4) With regard to my alleged failure to recognise any act or subject in judging, and my inability to distinguish myself from other selves, I will merely refer to what I have written on these heads,¹ and will pass on to another misunderstanding. When I speak of using content as "loose," Mr. Strange takes me to mean that this content in fact is removed and that the actual fact is destroyed (pp. 472-475). He does not argue that this is what I *ought* to hold, but treats me as holding it. I am aware of no justification for this interpretation except that the result is of course ruinous to myself.

(5) On page 478 there is a passage which I notice because it exemplifies a common misapprehension. Mr. Strange, like some other advocates of realism, fails to understand the position which he is anxious to attack. The contention which he has to meet is this, that he is taking a mere abstraction for reality, and that the burden of showing that what we contend is an abstraction is really more, rests properly with him. Such an idea seems not to have occurred to him, but he will find that it is perhaps more worth his attention than the ingenious arguments which, I must acknowledge, he does *not* attribute to myself. In the same way I would add (though this has no reference to Mr. Strange) that it is idle to advocate the ultimate reality of change, unless you at least consider the view that mere change is no more than an abstraction.

The above misconceptions, it seems to me, leave little value to Mr. Strange's article as a criticism of myself. Certainly my views may be no

¹ On the second of these I have touched recently in *MIND*, No. 74, pp. 155-156.

better than those which he has attacked, but at least they are different. But there are doctrines which Mr. Strange has incidentally laid down, which, if they were tenable, would render detailed examination of what I hold quite superfluous. As to that I am entirely of one mind with Mr. Strange. But he does himself here, I must think, a most serious injustice when he speaks (p. 479) of his having "tried to elaborate" his doctrine. That is precisely the thing which on the contrary I would invite him to do, for, as he has left it, I feel that I could not in common fairness to himself attempt to criticise his position. I wish to keep in mind that, if a view opposed to my own is untenable, it does not follow that I myself am not equally wrong; just as the pointing out of misconceptions may, I know, do nothing to remove real difficulties. But if Mr. Strange would seriously apply himself to such a statement of his doctrine as would enable the reader to see how it can hold against familiar objections, I venture to think that, far from losing his time, he would produce something which would be read with attention and interest.

F. H. BRADLEY.

"REAL KINDS" AND "GENERAL LAWS".

DR. MELLONE'S interesting discussion of "Real Kinds" and "General Laws," in *MIND*, No. 78, raises several points of considerable importance.

With respect to the Aristotelian Doctrine of the *γένος* and *εἶδος* and the Platonic doctrine of the transcendence of the *εἶδη* with their medieval counterparts, *universalia in rebus* and *universalia ante res*, he says the "question is not what these doctrines meant to the consciousness of Aristotle or Plato, or the Scholastic Realists"; it is, "of the implicit philosophical tendency of these epistemological speculations and of its statement in terms of modern thought. It is irrelevant," he continues, "to object that the modern statement involves an idea which was not part of Aristotle's or Plato's conscious thinking and would have greatly disturbed his general system of the world."

Now it is of course stimulating to follow a germinative idea down the ages, see how it is modified by the thought and knowledge and beliefs of each succeeding generation, how it is presented by this writer and by that, how it is applied, how illustrated, how enriched, how impoverished. But it is well to remember that an idea, as it is won, and as it is presented by every successive consciousness is not the same; ideas are not dead things which we can transfer intact from one to another; we have to seize them, mould them, create them by our own activity; every presentation of an idea is something new.

Dr. Mellone would not, I believe, deny this; but what I want to lay stress on is that it is much more in the interests of clear thinking to emphasise the contrasts between the ancient and modern way of regarding the universal than on their similarity, which indeed according to Dr. Mellone's own showing exists only in underlying philosophical truths which were not apparent to the original thinker, and which in their modern statement involve an idea which would have greatly disturbed his general system of the world. If in biology we were always to dwell on the debateable ground where species seems to merge into species, we should never arrive at any clear ideas; from its very nature thought requires to find or to make well-marked distinctions or division lines in its material. In the same way when the material thought about is *thought* itself, when it consists of concepts and theories, it is the distinctions and oppositions which ought to be thrown into relief in order that the

one theory may stand out against the other, and thus both be made plain.

Again Dr. Mellone says, "Every real law of Nature is *ante rem*, and would never come into action at all if the circumstances to which it is applicable never occurred; on their occurrence it is *in re*, and waits to be traced by us in the empirical result".

This is of course a common enough way of expressing the matter; but when we come to examine the language, is it not dangerously figurative? In what sense does the law come into action when the circumstances occur? Does not this mode of expression give countenance to the conception of a law as something over and above the course of events and guiding their outcome? In what sense does the law wait to be traced by us? Dr. Mellone himself would, I know, in this connexion hold no parley with the suggested interpretation of the term law; but his hypothesisation of the term in the sentence criticised seems to me not unlikely to lead to dangerous error.

For can a general law, in Dr. Mellone's sense of the term, *viz.*, a hypothetical or disjunctive judgment, be said to exist at all before it has been discovered? Can it exist except in a mind? Leaving aside the possibility of its existence in the creative mind—if we posit such a mind—then it is *illustrated in re*, but it does not exist there as a universal; nor can it exist as a universal except in a rational mind. The law of gravitation we may say exists *ante rem* with reference to the fall of an apple to-day, but it did not exist *ante rem* with reference to the fall of an apple before Newton's time. Science suggests the universal, and then sees whether things accommodate themselves to it, in which case it becomes a law; in its perfected form it becomes a law of quantitative relation.

In connexion with this discussion it might be pointed out that not only does science create laws, which as such are real only in minds; but she also in a sense *creates things* which have a reality in themselves similar to that which we attribute to the external world. Not enough stress, I venture to think, is laid upon the difference between these two modes of creation. Philosophy gives all her attention to the general laws concerning which many words more or less valuable have been written, but she passes over with slight interest the creation of things. Among these things we have in physical science the atom, the molecule, the ion, the ether, and in modern psychology the idea-complexes of Freud which are helping in the coming revolution of our conception of the self.

In creating these things, science is sometimes accused of deserting the real world for an imaginary universe of her own. Sometimes this is the case. The most famous case of this "desertion" is to be found in Newton's corpuscular theory of light. The corpuscles were solid particles of great minuteness which issued at high speed from the source of light and bombarded space. Reflected from objects of perception they entered our eyes and gave rise to sensations of sight. But on the things thus created by science a very stringent condition is imposed. This is that by their essential nature they consistently explain the phenomena of our sense world. In this explanation the corpuscles finally failed; and the wave theory of light, which has hitherto passed all the tests which we can apply, supplanted Newton's theory. The corpuscles then had no real existence. They had made their claim to reality, so to speak, but had not justified it. But had they been successful, had they sufficed to explain all the actions of light, then we should have accepted them as existing things. They served their purpose, they served as a peg to hold together several of the phenomena of light, such as reflexion and refraction; and any scientific construction which thus unifies phenomena

may be regarded as a stage in our progress towards reality. The more phenomena it unifies, the more certain we may be that we have actually reached reality in the physical sphere.

It is true we may not feel certain of the reality of any of the things yet created by science, for we are still but knocking at the gates of knowledge; yet we can hardly doubt that in time the penetrating insight of genius will make the construction which will absolutely coincide with reality. Meantime my point is that if or when this point is attained, and the things guessed at by science are there, then science has not created them in the sense that she creates the general laws; she has divined or discovered them.

To return to the point from which I started, I would suggest for Dr. Mellone's consideration the question whether it is not in these things divined or guessed at by science rather than in the general laws that we have the modern form of the 'real kinds' of Aristotle.

MARGARET DRUMMOND.

NOTE ON ARISTOTLE AND THE MOON'S AXIAL ROTATION.

I AM asked by a correspondent in the last number of *MIND* (July, 1911) to explain what I mean by saying that the moon's axial rotation is a matter of ocular demonstration, and that it ought as such to have been admitted by Aristotle. If my critic will take the trouble to walk round a post or other fixed object with his face turned towards it the whole time, as the moon's face is turned towards the earth, he will find that he cannot do this without describing a complete revolution on his own axis. Or he may reach this conclusion without rising from his chair by drawing a diagram representing the positions successively occupied by a spherical body revolving in a plane orbit about another body to which it always turns the same face. This is how the moon actually behaves; this is the proof of her axial rotation; I call this a proof by ocular demonstration—supplemented as every so-called proof must be by certain abstract reasons; and this proof was just as accessible to Aristotle as to us.

Let me add in justice to the Stagirite that if the moon were carried (as he supposed she was) round the earth by an etherial sphere, she would equally present the same face to us at all times. But in the passage to which I referred he seems to think that such an appearance on the part of a free body would be a proof of its axial immobility. Aristotle was a most acute observer of surfaces; but in my opinion his was not the mental vision to see through a millstone.

A. W. BENN.

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